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The Effect of Transition Word and Pre-Speaking Activities on Text Type:Moving from Intermediate to Advanced Speech

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ABSTRACT

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Over the past several years, much research has investigated the role of pre-task planning, including solitary, group, and teacher-led planning, on the variables of complexity, fluency, and accuracy in Second Language Acquisition (SLA) research. (Foster & Skehan, 1996; Gaillard, 2013; Geng & Ferguson, 2013). Additionally, other studies have investigated L2 learners' use of paragraphs and/or the role of conjunctions, i.e. transition words and expressions, in developing ideas and increasing cohesion (Mendelson, 2012; Rass, 2015). A gap remains, however, in seeing how pre-speaking and transition word activities together can promote proficiency in terms of text type, i.e. the move from word level speech and producing strings of sentences to paragraph level discourse. This study seeks to fill this gap by examining two teaching methods, namely Prelude to Conversation, or pre-speaking (Thompson, 2009), and transition word activities, to investigate the effect that these teaching methods have on increasing complexity and fluency among Intermediate-level learners of French. Complexity was measured by investigating the sub-components of total transition words, taught transition words, total clauses, words per clause, and total words. Fluency was measured by investigating the sub-components of time duration (total minutes) and words per minute. Furthermore, a case study illustrates the implications of increases in complexity and fluency for text type.

Subjects were recruited from third semester French courses at Brigham Young University and were subsequently divided into three groups with each group receiving a different teaching method: Group 1 received transition word pre-activities, Group 2 received pre-speaking with a focus on content and forms needed to respond to the task, and Group 3 received a combination of both teaching methods. The study lasted four weeks with a Pre-Test in week one, followed by two weeks of treatments before completing the Post-Test in the fourth week. During the second and third weeks, each group received their respective treatments before responding to prompts that were identical for each group. Following the data collection, the speech samples were transcribed and analyzed for the sub-components of complexity and fluency.

Results show, when comparing the Pre-Test to the Post-Test, that pre-speaking has a broader impact on complexity and fluency, either alone or when combined with transition word activities, impacting in particular total clauses, total words and response duration. When transition word activities were taught alone, there were greater gains in the use of taught transition words. The findings also demonstrate that even simply practicing providing oral responses regardless of treatment did help learners make overall increases that led to Post-Test responses (without scaffolding) that did not return to Pre-Test levels.

Keywords: pre-task planning, teacher-led planning, pre-speaking, transition words, complexity, fluency

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List of Abbreviations

ACTFL = American Council on the Teaching of Foreign Languages

L2 = Second Language

RQ = Research Question

SLA = Second Language Acquisition

Trmt = Treatment

Chapter 1: Introduction

The American Council on the Teaching of Foreign Language's (ACTFL) oral proficiency guidelines have become the centerpiece of the L2 classroom in the United States in recent years. Being able to assess and describe students' proficiency levels for speaking, based on standardized criteria in a scale, has been indispensable to teachers and researchers alike in their current practices and efforts to identify better teaching methods. While it has become common practice for SLA researchers to reference these guidelines in their studies, it is unfortunately not easy to find research that explicitly explores how to help move L2 learners up the ACTFL oral proficiency scale in terms of the criteria outlined by the council (see Table 1 below). Instead, many proficiency researchers suggest that their findings, commonly stated in terms of accuracy, complexity and fluency, have implications for moving students up the proficiency scale without actually referencing categories such as global tasks, functions, content, context, or text type (Foster & Skehan, 1996, 1999; Gaillard, 2013; Geng & Ferguson, 2013). While statistics show significant benefits of certain teaching methods over others based on accuracy, fluency, and complexity, many of these studies leave a gap in the research pertaining to how certain teaching methods actually move L2 learners up the ACTFL oral proficiency scale. To this end, this study seeks to understand the impact of two different teaching methods, namely transition word activities and teacher-led pre-speaking activities, on L2 learners' oral performances in terms of text type. Indeed, text type is one of the several overlooked categories of the ACTFL proficiency guidelines in oral proficiency research despite its critical role in learners reaching the Advanced level. Consequently, this study will look in particular at how teachers can help move L2 learners from an Intermediate level text type (i.e., strings of sentences) to Advanced level discourse (i.e., paragraph level speech).

The ACTFL Oral Proficiency Guidelines

The ACTFL oral proficiency scale defines each level of proficiency in terms of four general components, namely global tasks and functions, context (setting and content), accuracy, or patterns of errors, and text type. Each of these is briefly defined in Table 1 below:

Table 1

ACTFL Oral Proficiency Levels (Shrum & Glisan p. 249)

Proficiency Level	Global Tasks and Functions	Context/Content	Accuracy/Patterns of Errors	Text Type
Superior	Discuss topics extensively, support opinions and hypothesize. Deal with linguistically unfamiliar situations.	Most formal and informal settings/Wide range of general interest topics and some special fields of interest and expertise.	No pattern of errors in basic structures. Errors virtually never interfere with communication or distract the native speaker from the message.	Extended Discourse
Advanced	Narrate and describe in major time frames and deal effectively with an unanticipated complication.	Most informal and some formal settings/Topics of personal and general interest.	Understood without difficulty by speakers unaccustomed to dealing with nonnative speakers.	Paragraphs
Intermediate	Create with language; initiate, maintain, and bring to a close simple conversations by asking and responding to simple questions.	Some informal settings and a limited number of transactional situations/ Predictable, familiar topics related to daily activities.	Understood, with some repetition, by speakers accustomed to dealing with non-native speakers.	Discrete sentences
Novice	Communicate minimally with formulaic and rote utterances, lists, and phrases.	Most common informal settings/Most common aspects of daily life.	May be difficult to understand even for speakers accustomed to dealing with non-native speakers.	Individual words and phrases

Proficiency, in terms of the ACTFL proficiency guidelines, has us evaluate language in terms of global perspective (talking about self vs. the local community and world), functions (what learners can do with the language, e.g., narrate, describe, provide opinions, support

opinions and even speak to abstract), time frames in which learners can communicate (past, present and future) and ultimately, the text type underpinning the language produced (lists of words, strings of sentences, paragraphs and multi-paragraph extended discourse) (ACTFL, 2012).

While accuracy is also outlined as a component of the guidelines based on the sympathy needed to understand speech production, the principal focus on accuracy, as measured by researchers in SLA studies, has become subsumed under the learner's ability to solidly perform the functions asked of them in the appropriate time frames with limited mistakes, etc. Therefore, while many SLA researchers continue to focus on accuracy as a main component of language proficiency, the focus has shifted under the ACTFL proficiency guidelines to becoming more meaning-based, or the ability of L2 learners to communicate meaning with minimal focus on accuracy. Indeed, many recent studies have exhibited how accuracy is rarely affected by different treatments, yet the complexity and fluency of speech increases under several treatment conditions (Foster & Skehan, 1996; Geng & Ferguson, 2013). Because few SLA studies have researched how complexity and fluency, as traditionally measured, have implications for moving L2 learners up the ACTFL proficiency scale in terms of the categories listed above, this study seeks to do just that: measure how complexity and fluency play a role in moving L2 learners up the ACTFL scale. Indeed, since several different categories must be considered when doing this, this study focuses on how complexity and fluency have implications for increasing text type, or the level of discourse at which L2 learners produce speech. In particular, the thesis examines one contributing factor to this shift from sentence to paragraph-level speech, namely the use of transition words to increase complexity. To this end, this study investigates the impact of transition word activities and teacher-led pre-speaking activities in helping move L2 learners

from Intermediate level speech (discrete sentences or strings of sentences) to Advanced oral performance (paragraph level discourse).

If teachers are to help students increase their language skills in response to this proficiency-driven approach, it becomes increasingly necessary to rethink approaches to the classroom language learning experience. How can teachers effectively help move their students up the ACTFL proficiency scale?

From Novice to Intermediate: The Role of Pre-Speaking

According to ACTFL, a Novice level speaker, "…can communicate short messages on highly predictable, everyday topics that affect them directly. They do so primarily through the use of *isolated words* and phrases that have been encountered, memorized, and recalled" (ACTFL, 2012, emphasis added). Moving L2 learners up the proficiency scale in terms of text type then focuses on how to get them to move past memorization and rote repetition to creating complete, logical sentences and strings of sentences.

Gaillard's (2013) study on the effects of pre-speaking on Novice L2 learners' speech performance focused on moving first-semester French students from producing memorized phrases and words to creating at the sentence level, i.e., Intermediate level speech. Her teaching methods (teacher-led pre-speaking; see below) prepared students to produce discrete or strings of sentences while talking about self in informal settings.

The following example from Gaillard's study (Table 2) shows the typical move from Novice speech to Intermediate speech with teacher-led pre-speaking. The activity illustrates the focus on both content needed to respond to the prompt (as illustrated in the left column) and language forms needed to respond to the prompt in French (outlined in the right column). By doing this, the teacher not only reactivates the necessary schema the L2 learners need to respond,

but provides details and elaboration tools needed to produce speech at a higher proficiency level. The prompt for the following example (taken from Gaillard, 2013) was to describe the perfect city.

Table 2

Describe the Perfect City: Pre-Speaking (Gaillard, 2013)

CONTENT (Translated from French)	FORMS
What is in a city? Which buildings?	restaurant, pharmacie, école, université, hôpital, musée, université, supermarché, poste, gare, parc, café, église, hôtel, magasin, maison • Il y a ≠ il n'y a pas DE
Details about buildings- HOW are they?	beau, joli, vieux, nouveau, mauvais, bon, petit, grand, autre • Avant ou après le nom? BAGS • Différence si c'est masculin ou féminin, bel/nouvel/vieil
Activities: WHY are the buildings important?	travailler, manger, dîner, acheter, voir un film, danser, lire un livre, visiter, retrouver des copains, jouer (au tennis), voyager
WHERE are the buildings?	entre, derrière, devant, en face de, loin de, près de, à côté de, au coin de • de +le = DU • de+ la = DE LA • de + l' = DE L' • de + les = DES Les parties de la ville: dans la banlieue, dans un quartier, dans le centre-ville

The impact of pre-speaking activities when compared with learners not receiving any planning before responding to oral prompts cannot be understated. As the samples from Gaillard's (2013) thesis illustrate, pre-speaking activities (see Table 3) resulted in substantially more developed responses than those not preceded by pre-speaking activities (see Table 4).

Table 3

Describe the Perfect City: Response with Pre-Speaking (Gaillard, 2013)

Original French	English Translation
Dans ma ville parfait, il y a beaucoup de restaurant parce que j'aime manger et HEU puis il y a une grand HEU place dans le centre-ville et bon il y a beaucoup de restaurants. Il y a beaucoup de magasins grands avec beaucoup de choses et toujours j'aime acheter dans ces magasins. Et bon dans son place, dans ses place à côté de de HEU restaurants il y a un cinéma aussi et j'aime regarder HEU des films dans ces cinémas. HMM Et loin du cinéma, dans la banlieue, il y a une egli où je vais le dimanche et HMM bon HEU près de l'église HEU il y a ma maison, qui est très grande et très très belle aussi Et HEU ma maison est une maison rouge et HEU et une un nouvelle maison aussi. HEU. Et en face de ma maison HEU il y a les maisons de mon ami de mes amis. Et les week-ends mes amis et moi nous aimons aller à grande place PAUSE à regarder des films et manger dans le restaurant. PAUSE. Bon aussi dans le centre-ville, à côté de la place, il y a une université qui s'appelle l'université de Brigham Young ou j'étudie tous les jours HEU et HEU avant l'université il y a PAUSE deux hopitals et beaucoup de pharmacies. Bon l'université de Brigham Young n'est pas nouvelle mais c'est vieux.	In my perfect city there are many restaurants because I like to eat and hmm also there is a large plaza in the life center and well there are lots of restaurants. There lots of stores big with many things and always I like to buy in these stores. And well on his plaza, on this plaza next to to hmm the restaurants there is a movie theater too and I like to watch hmm movies in these movie theaters. Hmm far from the movie theater in the suburb there is a , chur, church where I go on Sundays and hmm well hmm next to the church hmm there is my house which is very spacious and very very beautiful too. And hmm my house is a red house and hmm and a a new house too. Hmm and in front of my house hmm there are the houses of my friend, of my friends. And on weekends, my friends and I we love to go to big plaza and watch movies and eat in the restaurant. PAUSE. Well also in life center, next to the plaza, there is a university that is called Brigham Young University where I study everyday hmm and hmm before the university there are two hospital and many pharmacies. Well Brigham Young University is not new but it is old.

When comparing the response in Table 3 to the one in the following table, the effects of pre-speaking become immediately apparent.

Table 4

Describe the Perfect City: Response with no Pre-Speaking (Gaillard, 2013)

Original French	English Translation
Les ville parfait es HEU une banlieue heu PAUSE a cote des PAUSE a cote des supermarchés et HEU activités tes. Les. Les villes HEU. Es grandes. Heu. Y boco pourquoi personnes HEU la ville a une cinéma y PAUSE y une igle HEU. la ville PAUSE les villes HEU. Les villes est HEU la scenery HEU es belle PAUSE elle HEU très belle HEU. Les montagnes HEU a cote des HMM en face des HEU la ville	The perfect city is.. Hmm.. a suburb.. Hmm.. PAUSE.. next to.. PAUSE.. next to supermarkets and.. hmm activities, your. The. The cities.. Hmm.. is big. Hmm. Y much why people.. Hmm.. the city has a movie theater y.. PAUSE y a igle.. hmm. The city.. PAUSE.. the cities ..hmm. The cities is.. hmm. The *scenery* hmm.. is beautiful.. PAUSE.. It.. hmm very beautiful hmm. The mornings hmm next to hmm the city.

This case study, though not produced by the same subject, demonstrates that teacher-led pre-speaking can help even Novice speakers/learners in their first semester of French produce oral responses at the Intermediate level with significant results in terms of accuracy, complexity, and fluency. Furthermore, these findings indicate that this type of pre-speaking, as a teaching method, could lead not only to students performing at a higher proficiency level, but that repeated performance over time could lead to higher levels of proficiency (Gaillard, 2013 p. 68). Indeed, Gaillard's study marks the only research conducted in recent years focusing on pre-task planning that found significant increases in *all* categories of measuring proficiency (accuracy, complexity, and fluency) for teacher-led planning over solitary planning or no planning (Gaillard, 2013; Geng & Ferguson, 2013; Foster & Skehan, 1996; Foster & Skehan, 1999; Ortega, 1999; Yuan & Ellis, 2003). Based on Gaillard's findings concerning the benefits of teacher-led pre-speaking, the current study will also focus on this teaching method, but to test its effect on moving L2 learners from Intermediate level speech to Advanced, specifically in terms of promoting an increase in text type. That is, how to move L2 learners from producing sentences and strings of sentences to connected, well-developed paragraphs. To facilitate this

shift, allow us to consider one contributing factor, namely the role of transition words in helping L2 learners increase their level of discourse.

Definitions

Before continuing with a discussion of the current study, it is critical to define a number of terms which will be used throughout the thesis and in particular to outline how these terms are used herein.

Transition Words

Steinman (2013) defined transitions as "linking words placed between sentences and between paragraphs… in writing (and in speaking) [that] facilitate coherence and cohesion when used correctly." To move from sentence level discourse to paragraphs, therefore, it is necessary to consider the role of transitions in oral performance. Words and expressions such as "therefore", "consequently", "on the other hand", and "in conclusion" all serve as transition words- both between sentences and ideas, as well as, at times, between paragraphs. Although all these words may qualify as transition words, it is worth nothing that not all transition words and phrases are created equally. Some add information regarding time and chronological information, e.g., "afterwards" or "next", while others add details and may highlight a contrast, e.g., "conversely", "on the other hand", etc. Research addressing the role of transition words in general as well as the differing roles that transition words play will be outlined in Chapter 2 of this thesis.

Pre-speaking (Prelude to Conversation)

Developed by Chantal Thompson (cf. Thompson & Phillips, 2009), what I refer to as pre-speaking is known formally as "prelude to conversation". While Gaillard's (2013) study was the first to examine this teaching method in research and did indeed demonstrate significant benefits

for Novice level students, more research has been needed to study the effects of pre-speaking on Intermediate L2 learners moving up to Advanced level speech.

Recall from the example used above from Gaillard's study that this is a teacher-led approach used to activate the background knowledge and anticipate the content of the oral prompt prior to speech performance. More than just presenting the pre-speaking activity to L2 learners, the teacher and the learners are both actively engaged in discussing necessary content and forms needed to answer the prompt. The teacher is prepared beforehand, however, knowing the direction the pre-speaking needs to go to activate the correct background knowledge, thereby asking questions in the target language such as, "What buildings are in a city?" to solicit responses from the learners. This information contributes to the "Content" column on the board or screen. While eliciting necessary vocabulary words and structures, the teacher may also indicate mistakes to avoid by asking specific questions. For example, the teacher may say in the target language, "What is the rule here?" or may otherwise draw attention to common mistakes to be avoided with certain vocabulary or structures. This information contributes to the column indicated by "Form".

The final step of the pre-speaking activity (although this may be done prior to starting the pre-speaking activity altogether) is to show a model of what the teacher expects a good learner response to look like. Although this model does not stay visible to learners during speech performance, thereby preventing students from simply copying the model, it serves as a clear target or expectation from the teacher up front and helps learners make connections from the pre-speaking activity to actual speech production.

Cloze Paragraph

A cloze paragraph serves as an elaboration/detail-building activity to allow L2 learners to practice adding logical details, including transition words, to a context. Often, a word bank is given to help learners add details as they wish. Table 5 below illustrates an example of a cloze exercise with an accompanying word bank (upper right hand corner as "Word/expression options"):

Table 5

Cloze Paragraph Example

Prompt: A favorite teacher	Word/expression options: first, then, after, finally, because, concerning, for example, however, in my opinion, I think, I believe
_____, my favorite teacher was very kind. He gave us homework, _____ he always gave us extra time to do it. _____, he took the time every day to read stories to us, _____, adventure stories or fantasy novels…"	

This type of activity will be used in the current study to give subjects an opportunity to activate schema and use familiar transition words in a context prior to connecting and creating sentences.

Scaffolding

One additional term should be defined before moving on, namely "scaffolding." Based on a study conducted by Beet, Hawkins & Roller in 1991 focusing on independent learning, there are three essential steps that define scaffolding. First, the authors state that there must be an interaction between a learner and an expert. Secondly, they emphasize how learning must take place within the zone of proximal development, in other words in the area in which the novice is able to learn with the guidance of the expert. Finally, the third element involves the treatment or interaction gradually being removed as the learner improves over time. This Vygotsky design is the foundation for scaffolding in learning in general, but also for language learning specifically.

As it is used in this study, scaffolding refers to any treatment or activity used prior to subjects responding to an oral prompt, e.g., teacher-led pre-speaking, transition word activities, or a combination of both.

From Intermediate to Advanced: The Role of Transition Words

The role of transition words has been well documented for helping students improve in writing, however, as Sauro (2011, p. 379) clearly states in her study on computer-mediated communication, "the ability to support cohesion and coherence across longer stretches of discourse or multiple shorter utterances has received the least amount of attention." The question thus remains as to how one turns a series of discrete sentences into cohesive, detailed expression, especially when that expression is in terms of providing oral rather than written responses.

While several studies focus on how discourse develops and increases from sentences to paragraphs over long periods of time (e.g., Mendelson, 2013; Rass, 2015), without actually referencing transition words, a few other studies have researched the role of transition words in developing text type (Darweesh & Kadhim, 2016; Rivard, Minkala-Ntadi, Roch-Gagné & Gueye, 2017). These studies will be further discussed in Chapter 2 of this thesis in an effort to provide a rationale for measuring the role of transition words in this current study while also highlighting the gap in the literature for a role for transition words in increasing oral proficiency.

Research Questions

This thesis seeks to fill the gap in proficiency research by investigating the relationships between pre-speaking, transition word activities, and their impact on text type in the move from Intermediate to Advanced-level discourse as outlined in the ACTFL proficiency guidelines. More specifically, the current study seeks to answer the following questions:

1. Do transition word, pre-speaking activities, or a combination thereof have an effect on complexity in oral responses? If so, how? Is one type of activity, i.e. treatment, more beneficial than the other?
2. Do transition word, pre-speaking activities, or a combination thereof have an effect on fluency in oral responses? If so, how? Is one type of activity, i.e. treatment, more beneficial than the other?
3. How does an increase in complexity (and to a lesser extent, fluency) reflect an increase in text type?

Thesis Overview

This study will focus on answering the research questions above over the course of five chapters, beginning with this introduction. Chapter 2 will consist of a literature review to show previous research related to pre-speaking and transition word activities and gaps in the research that justify the current study. Next, in Chapter 3, I will present the methodology used to carry out the study including instruments, procedures, and an outline of statistical analyses used to measure the collected data. Chapter 4 will then contain the results of the statistical analyses for the study including descriptive and inferential statistics for complexity and fluency. Finally, Chapter 5 will cover a discussion of the results from the study to answer the research questions as well as outlining the limitations of the experiment and suggestions for future research.

With this overview in mind, I will now turn to the relevant literature for this study as outlined in Chapter 2 which follows.

Chapter 2: Review of Literature

With the shift towards proficiency-focused language teaching (cf. Chapter 1), many teachers and researchers alike in the United States have begun to rethink language teaching in terms of the ACTFL guidelines. As noted, one key component of measuring oral proficiency according to these guidelines is text type, in other words the discourse level at which L2 learners speak. Despite text type being a critical factor in learners moving up the scale, it has remained an often-neglected aspect of proficiency-based research, lacking explicit research or measurement in connection with other analyses such as fluency or complexity. Since this study focuses on moving students from Intermediate to Advanced oral proficiency, I focus in particular on whether students are able to move beyond strings of sentences, the text type characteristic of the Intermediate level, to more paragraph level oral responses reflective of Advanced-level speech. By focusing on text type, this study attempts to investigate a relationship between discourse level in terms of transition words commonly used in connected sentences and paragraphs and the more common approach to analysis in terms of fluency and complexity (Foster & Skehan, 1996; Gaillard, 2013; Geng & Ferguson, 2013). To better understand how a shift towards paragraph level speech, increased fluency, increased complexity and even transition words help in measuring proficiency, it is necessary to review the literature relevant to moving L2 learners from intermediate to advanced level discourse in terms of these variables.

To lay the groundwork for this thesis, this chapter begins by examining how scholars have described (cohesive) paragraphs in the literature and the role conjunctions/transition words in that paragraph structure. Next, I identify the role of fluency and complexity in improving text type based on previous research, i.e., moving from sentences to paragraphs, to lay the foundation for how the speech samples were analyzed in the current study. Finally, building on Gaillard's

(2013) thesis in which she demonstrated the beneficial effects of pre-speaking activities in helping novice learners (in just their first semester of French classes) produce intermediate level speech, I also outline the role of pre-speaking activities and how this planning contributes to a learner's language production and improvement. In summary, this chapter seeks to illuminate the previous research upon which the current study draws. With this in mind, I now turn to a discussion of how researchers have defined paragraphs.

Defining Paragraphs in SLA Research

Although the difference in text type between Intermediate and Advanced speech, according to the ACTFL proficiency guidelines (2012), is defined as a shift from strings of sentences to well- organized paragraphs, the guidelines themselves do not provide an official definition of oral paragraphs. Since this shift towards paragraphs forms a core component of the current study, it therefore becomes critical to examine how scholars have defined paragraphs. Indeed, there is tremendous variability in this definition and most of the research focuses primarily on written paragraphs with little research clearly defining what this means for oral paragraphs. For this reason, my discussion below focuses on how scholars have defined paragraphs in writing.

In defining paragraphs, researchers have generally done so based on types of sentences, which contribute to paragraph organization. Foundationally, these sentences have been defined as topic statements, supporting details, and concluding sentences (Christensen, 1965; Myhill, 2009; Rass, 2015). For example, in his seminal research defining paragraphs in SLA, Christensen (1965) defines more specifically what these different sentences look like (see Table 6). He suggests that paragraphs begin with a topic sentence upon which all supporting details rely to create cohesion. Following the topic sentence, the supporting details are identified in two

ways: those that form coordination (i.e. sentences coordinate together to create one complete idea based on the topic sentence) and details of subordination (i.e. sentences which are not coordinated, but rather lead from one topic to another based on the details in the sentence preceding them). Finally, he details how a cohesive paragraph ends with a sentence that marks the end of sequence of sentences that neither subordinates nor coordinates with the details of the paragraph, but rather ties back to the topic sentence.

Table 6

Christensen's Definition of a Paragraph (Christensen, 1965, pp.146-153))

Topic Statement	• Top sentence in a sequence of sentences • Sentence on which supporting sentences rely for cohesion
Supporting Details	• Sentences that follow the topic sentence. • Details of coordination • Details of subordination
Concluding Sentences	• The end of a sequence of sentences

Elsewhere in the literature, scholars have outlined the use and types of conjunctions as the defining factors of a paragraph (Darweesh & Kadhim, 2016; Halliday & Hasan, 1976; Rivard, Minkala-Ntadi, Roch-Gagné & Gueye, 2017). As opposed to assuming that the use of conjunctions automatically indicates paragraph level speech, several of these studies analyze different categories of conjunctions and their role in the structure of a paragraph. By defining conjunctions in terms of, for instance, temporality or causation, these researchers implicitly reference text type and how conjunctions perpetuate strings of sentences or move towards paragraph level discourse. Despite the differences in how scholars have defined the components making up paragraphs in their respective studies, what they have in common is a focus on how

sentence and conjunction types, organization, and content serve to provide cohesion and coherence within and between paragraphs.

Conjunctions

As just noted above, one critical means by which strings of sentences move towards paragraph level speech is the use of conjunctions. Consider the following sentences in Table 7 which contrast two different versions of communicating the same ideas, namely strings of sentences versus connected sentences.

Table 7

Examples from Student Writing Support Quicktips: Choppy Sentences

Strings of Sentences	She took dance classes. She had no natural grace or sense of rhythm. She eventually gave up the idea of becoming a dancer.
Connected Sentences Using Conjunctions	She took dance classes, ***but*** she had no natural grace or sense of rhythm, ***so*** she eventually gave up the idea of becoming a dancer.

In the first version, namely the strings of sentences, the three sentences are short and repetitive such that they could be described as “choppy.” However, by using conjunctions and transition words to connect these three sentences, the three sentences combined to form a single smooth sentence as illustrated for the “connected sentences using conjunctions” version of the response. It should be stated, however, that although conjunctions do serve to connect different types of sentences, they do not necessarily indicate elaboration, an essential element of developing advanced oral proficiency. Indeed, the addition of these transition words did not add new information in the example above but simply helped link those ideas together. Thus, in order to understand how conjunctions play a role in moving L2 speakers up the proficiency scale in terms of oral proficiency, it is necessary to also understand that some conjunctions, e.g., “and”, “or” and “but” may actually perpetuate the use of strings of sentences (an intermediate level indicator) rather than helping students construct paragraph-level discourse. This, then, leads us to ask how transitions can help facilitate a move towards the paragraph-level speech characteristic of advanced discourse.

One such way that conjunctions and other transition-type words contribute to paragraph level speech is their use in introducing subordinating clauses. Across several recent studies, researchers have found a strong association between the use of conjunctions and paragraph cohesion in both writing and speaking (Darweesh & Kadhim, 2016; Mendelson, 2012; Rass, 2015; Rivard, Minkala-Ntadi, Roch-Gagné & Gueye, 2017). Consider results of Mendelson’s (2013) recent study on chatting in paragraphs. In this study, carried out over the course of an entire semester, results of a case study, including one subject over time, demonstrate that as students had more opportunities to speak and express opinions over time, subordination also increased, leading towards more academic discourse and use of conjunctions. Mendelson

illustrates this by comparing his subject's "turns", or the amount of speech one produces before another subject speaks in interpersonal conversation, from October 14th to November 6th (see Table 8). In both tasks, the case study subject was asked to provide an opinion.

Table 8

Mendelson Case Study (Mendelson, 2012)

October 14th- Was this book about injustice? Defend your opinion.	Response: It's very simple. I don't think speaking about injustice was the intention of the author because it's a simple story for children.
November 6th- What do you think about the captain in this short story?	Response: it's possible that the captain had uncountable guilt because he's killed many people and that's why he went to the barber prepared to die and when he said 'it's not easy to kill' he's saying that he's a bigger, or stronger man than the barber because he's capable of killing and the barber isn't.

From the examples above, it is clear that from October 14th to November 6th, the subject began using more subordination and conjunctions in his or her response. Mendelson attributes this fact to "explicitly ask(ing) [subjects] to express opinions" because prior to October 14th, opinions were not explicitly solicited (p. 408). This suggests not only the importance of tasks and clear prompts, but asking the learners to engage with the material more deeply and thoughtfully.

Just as transition words can be used to measure subordination, they contribute different information to the sentences and, in turn, to the paragraphs (cf. Darweesh & Kadhim, 2016; Rivard, Minkala-Ntadi, Roch-Gagné & Gueye, 2017). In one study (Darweesh & Kadhim, 2016), researchers set out to determine how learners used transition words in spoken paragraphs. They noted that most errors were caused by using incorrect conjunctions, recognizing incorrect conjunctions, or not using any conjunction at all (Darweesh & Kadhim, 2016, p. 179). In coming to these conclusions, aided in part by categorizing types of transition words used, they were able to determine that an excessive number of additive (e.g., "and") and adversative (e.g., "but")

conjunctions were used by their subjects. By excessively using additive and adversative transition words and using incorrect conjunctions, the subjects perpetuated sentence-level discourse, failing to reach paragraph level speech. A similar result was found by Rass (2105) in his study examining the differences in written paragraphs from Arabic to English. Rass (2015, p. 55) noted that "supporting details…are usually expressed implicitly in long clauses with excessive use of 'and', 'also', 'which' and 'that'', thereby providing further support for conclusions reached by Darweesh & Kadhim (2016).

Like Rass' (2015) study, Rivard, Minkala-Ntadi, Roch-Gagné & Gueye (2017) categorized transition words into similar categories such as additive, temporal, causation, and opposition. In their study, their intent was to compare transition word use among heritage French learners and L2 French learners. After analyzing 487 compositions from both high school and university level heritage and L2 students, the researchers concluded that, overall, students were using more causative transitions (e.g., à cause de, parce que, donc, etc.) and fewer temporal transition words (e.g., first, then, after, etc.), additive words (e.g., and), and opposition words (e.g., mais, par contre, cependant, alors que, etc.). While the extensive use of causative transition words may suggest elaboration and details that indicate paragraph level speech, the researchers also conclude that L2 learners, "have a tendency of repetitive use and circulate through the same words" (p. 70). Furthermore, they suggest that this is due to "the learning of language [being] based on the transmission [of information] and less on communication" (p. 70).

Both of these previously mentioned studies fail to provide specific examples of how transition words in each category are being used by students. By looking at each transition word category, however, it is possible that additive and temporal words may perpetuate a string of sentences (i.e. giving a series or sequence of events without elaboration) whereas causation or

opposition words may lead to elaborate and rich descriptions of an idea, thus showing how the *type* of a transition word (or expression) can have direct implications for text type. The current study then introduces a variety of transition words to help subjects move beyond strings of sentences to rich elaborations. In addition to understanding how different types of transition words and expressions affect text type, it is also important to understand fluency, or the rate at which L2 learners produce speech, and its implications for text type.

Fluency

As defined by Skehan and Foster (1999) and reemphasized by Gaillard (2013), fluency can be defined as "the capacity to use language in *real time*, to emphasize meanings, possibly drawing on more lexicalized systems" (Skehan & Foster, 1999, p. 96, italics added). Geng and Ferguson (2013) indicate that the term "fluency" can be operationalized in several ways depending on the purpose of the research. Those measurements include the following:

- Speech rate (Gaillard, 2013; Mehnert, 1998; Sangarun, 2005; Yuan and Ellis, 2003)
- Flow (Gaillard, 2013; Foster and Skehan, 1996)
- Smoothness (Kawauchi, 2005)
- Pruned speech (Geng & Ferguson, 2013; Ortega, 1999)

Speech rate and pruned speech are similar in that they both generally measure fluency in terms of words per minute, however, pruned speech does not account for time taken by pauses in speech or false starts. Also, unlike pruned speech, flow takes into account the frequency of pauses and the total duration of a given speech sample, thus showing fluency represented as a relationship between these two factors. While these three methods of measuring fluency focus on rate of speech and pauses in one way or another, smoothness refers to fillers, or repair fluency, and measures overall fluency in relationship with words speakers use to fill pauses (i.e. um, uh,

etc.). Gaillard (2013) found a statistically significant relationship between her teaching method (pre-speaking) and fluency as measured by words per minute.

In addition to measuring fluency, which has remained relatively consistent across studies (words per minute), it is also important to measure complexity. This last factor has been measured with less consistency throughout the research and yet ties in as a natural consequence of and as a concomitant feature alongside the increased use of transition words. With that, I will now discuss how complexity has been measured across several different SLA studies.

Complexity and Pre-Speaking

Oral complexity has been defined and measured inconsistently across SLA studies. Many researchers have focused on sentences as a whole, to be broken down for further analysis, while others have focused on singular components such as words and clauses. For example, Watanabe (2003) defined complexity by measuring length of sentences. Meanwhile Skehan and Ferguson (1999) measured complexity using c-units, which they defined as "a single word or a non-clausal phrase" (more specific than sentences). By contrast, Gaillard (2013) measured complexity by the number of words per sentence (length). Kaneko (2009), on the other hand, not only measures length of sentences as does Gaillard, but also defines complexity by counting the number of overall *number* of sentences. In short, there is no single consensus on how to define complexity.

Because there are many inconsistencies across studies, there are also inconsistencies in how to interpret the results of studies, including those relevant to the current study, that examine the benefits of pre-task planning methods, including solitary planning, group or pair planning, and teacher-led planning (pre-speaking). Since this thesis focuses on the role of pre-planning activities on complexity as a reference to text type, I now turn to a discussion of these pre-task

planning methods and their results in terms of complexity to illustrate the inconsistencies that exist across studies.

Pre-Speaking

As noted in Chapter 1, pre-speaking activities come in a variety of forms including teacher-led activities as well as those done by students alone or with other students. In this section, these teaching methods are further categorized in terms of pair and group planning, solitary planning, and teacher-led planning. Furthermore, this section mentions previous research that has examined these methods in an effort to indicate both consistencies and inconsistencies in the results and gaps that remain to be filled by this study and future research. With this in mind, I now turn to a discussion of the various findings related to different pre-speaking activity types.

Pair and group planning. One of the types of planning with implications for this study is pair or group planning. This involves two or more L2 learners planning together before giving their oral responses but, most critically, planning without explicit teacher help or individual preparation. Studies have shown that group work that involves mixed proficiency pairs, or pairs where one learner is at a higher proficiency than the other, results in greater complexity for the inferior partner (Galaczi, 2008; Tuan & Neomy, 2007). Additionally, Foster and Skehan (1999) point out that without the aid of an instructor, learners do not focus on language forms, but naturally focus on meaning. In this regard, one can see that while pair and group work does not lend itself to increased accuracy, they do result in increased complexity in terms of content expressed. Nevertheless, Foster and Skehan (1999) conclude that group-work is overall less effective than tasks involving no planning. This is because, they argue, there must be instruction on how to use the planning time for learners to be able to produce any *significantly* higher levels of complexity.

Not all research, however, has reached this same conclusion. Geng and Ferguson (2013) determined that complexity does not significantly improve in group planning, depending on the type of task students are being asked to perform. They do maintain, however, that group planning does have significant benefits over no planning at all. These results stand out compared to other studies because the tasks they employ are more simplistic. Decision-making prompts and information-gap activities may elicit limited responses in comparison to a debate or an opinion-based task, thus affecting lexical creativity and a variety to grammatical forms.

Based on the research (Gaillard, 2013; Geng & Ferguson, 2013) it is known that pair and group planning generally result in higher levels of complexity at least in terms of ideas expressed, but the effect it has on accuracy remains inconclusive or insignificant at best if not in dispute at worst. Researchers do not yet know, however, how this type of planning explicitly affects the text type at which learners produce speech.

Solitary, unguided planning. Like pair and group planning, solitary planning is another variable that has implications for communicative activities. Unlike group planning, however, solitary planning involves individual learners using a designated amount of time to plan for a task without teacher or peer collaboration. A few studies involving solitary planning (Foster & Skehan, 1996; Menhert, 1998) give a prompt to individual subjects with a 3-10-minute planning period where there is no interaction between subjects or subjects with the teacher. Furthermore, subjects were allowed to write ideas and thoughts, but not keep their notes during the presentations in several studies[1] (Moradi & Talebi, 2014; Ortega, 1999; Sangarun, 2005). Results of the previously mentioned studies show increases in complexity over the control group,

[1] In the study conducted by Nitta & Nakatsuhara (2014), participants were allowed to keep and refer to their notes during the presentation stage.

however, some gains in complexity, such as an increased number of clauses or sentences, were more significant than others.

Other studies have shown contrary results. Gaillard (2013) and Nitta and Nakatsuhara (2014) determined that solitary pre-task planning actually resulted in a limited effect on overall performance, the latter study citing that planning might actually deprive speakers of the chance to demonstrate their abilities to interact collaboratively. After further review of this latter study, the researchers offered the shortest amount of time (3 minutes) for pre-task planning, stating that, "a planning time over 3 minutes would not be feasible in most testing contexts, while previous studies have suggested that 1 minute might be too short for planning"[2] (Nitta & Nakatsuhara, 2014, p. 153). In Wigglesworth (1997), however, time was used and recognized as a variable where several different times of planning were used to see their effect on proficiency. The study determined that 3 minutes is an insufficient planning time for adequate task preparation. More research is needed to determine how allotted planning time and task-type correlate for optimal task performance.

The literature regarding solitary planning thus reveals many similarities with pair and group planning in as much as there are generally gains in complexity over the control group. A comparison of the literature also suggests that clearer methods for measuring complexity could be implemented as common practice to avoid extraneous variables. Further research needs to be conducted to determine best practices for measuring these categories.

Teacher-led planning. The final type of planning that will be analyzed here is teacher-led planning. Unlike the other types of planning, task preparation involves a teacher-student

[2] Nitta & Nakatsuhara (2014) did not have time as a variable in their study, but it strongly affected their results.

collaboration for a designated amount of time. The planning session usually involves the teacher drawing attention to both content (meaning) and form (structures). In Sangarun (2005), results showed how a combination of focus on both form and content led to gains in complexity. Other studies comparing teacher-led pre-communicative task approaches drew similar conclusions. (Gaillard, 2013, Foster & Skehan, 1999). While the studies show that the complexity of speech increased due to teacher-led strategies (Foster & Skehan, 1999; Gaillard, 2013; Moradi & Talebi, 2014), some show that complexity is actually stronger after solitary or group planning (Foster & Skehan, 1999; Geng & Ferguson, 2013), although the latter of these studies mentioned that the gains are not significant. Geng and Ferguson (2013) used a variety of task types across groups of students which yielded diverse results in complexity when compared to Gaillard's (2013) study, who applied one task type across the control and variable groups. Therefore, contributing factors to the diverse results regarding complexity may include the type of tasks the researchers are asking the learners to perform and their equivalency across control and variable groups.

Summary of Gaps in the Literature

Although research exists on the benefits of pre-communicative activities, only Gaillard's (2013) study highlights the ability of pre-speaking à la Thompson, i.e. Prelude to Conversation, to help learners move up the proficiency scale. Since Gaillard's subjects were first semester French students, this leaves the question as to whether this same approach could facilitate a similar move up the ACTFL proficiency scale for students one level up the scale, namely learners at the Intermediate level trying to move towards Advance proficiency.

Since the shift from Intermediate to Advanced requires a shift in text type from strings of sentences to paragraph-level speech, then the importance of transition words comes to the fore. Unfortunately, existing research on transition words deals with writing and not oral speech

production, or it simply investigates the emergence of transition words without explicit instruction on such transition words and expressions. This leaves yet another gap regarding whether explicit instruction on such transitions will trigger their use and a concomitant increase in complexity and fluency, i.e., a shift towards more paragraph level speech.

These gaps together combine to lead us to investigate both the role that pre-task planning plays in proficiency building and the role that transition words play in building more cohesive paragraphs. These two elements have never been combined to investigate how certain types of pre-task planning, including pre-speaking and the teaching of transition words, leads to increased proficiency in terms of text type. This combined gap thus results in the research questions below.

Research Questions

The previously mentioned literature has outlined how paragraphs and transition words have been studied and their possible connection to text type. Additionally, the research on fluency and complexity has demonstrated the consistencies and inconsistencies of measuring these two variables across studies, namely pertaining to pre-task planning and pre-speaking. Based on these factors, I pose the following research questions:

1. Do transition word, pre-speaking activities, or a combination thereof have an effect on complexity in oral responses? If so, how? Is one type of activity, i.e. treatment, more beneficial than the other?
2. Do transition word, pre-speaking activities, or a combination thereof have an effect on fluency in oral responses? If so, how? Is one type of activity, i.e. treatment, more beneficial than the other?
3. How does an increase in complexity (and to a lesser extent, fluency) reflect an increase in text type?

To answer these questions, the study outlined in Chapter 3 was conducted. With that in mind, I now turn to an overview of the study methodology.

Chapter 3: Methodology

As previously noted, the purpose of the study outlined in this thesis was to determine, first, whether explicitly teaching transition words could lead to improvements in 3rd semester French students' text type as measured in terms of clauses, transition words, and overall words spoken; and secondly, whether the means by which they prepared for oral tasks, i.e., only focusing on transition words, teacher led pre-speaking activities, or a combination of both also contribute to improvements in text type. This chapter details the methodology and procedure used in this study to answer the research questions. I begin by describing the subjects who participated in the study before moving on to a discussion of the treatments and oral tasks used to collect the data. Finally, I turn to an overview of the means by which data were analyzed in preparation for statistical analysis. With this in mind, I now turn to a discussion of the subjects who participated in the study.

Subjects

In this section I outline how subjects were recruited and the make-up of the groups, including how subjects were assigned to groups.

Recruiting

Since this study looks at moving students from Intermediate to Advanced level speech, subjects for this study were recruited from third semester French classes at Brigham Young University, where students' level of proficiency generally ranges from Intermediate Low to Intermediate Mid according to the *ACTFL Guidelines* (ACTFL, 2102). To incentivize

participation in the study, the course supervisor permitted an upcoming oral exam to be waived for students who completed all aspects of the study.[3]

Overview of Subjects and Group Assignment

A total of 48 subjects signed up to participate, of which 41 produced data reported in this thesis. The average age of subjects across all groups whose data were analyzed was 20.5 with a range from 18 to 26 years. six subjects had to be dropped because they did not complete all parts of the study while the data from one additional subject had to be omitted because the subject was not yet 18 years of age as outlined in the IRB protocol. Fortunately, the loss of subjects did not adversely affect one group more than others leaving overall groups of similar sizes.

In Table 9 below, I outline the total number of groups in the first column, with the total number of subjects per group in the second column. Additionally, I indicate the total number of males and females in each group under the total number of subjects in each group. Finally, I indicate the average time students in each group have spent studying French prior to the current study. The total number of years includes the time the subjects may have spent prior to their college courses learning French.

[3] Completion of the study included filling out both a hard and digital copy of the consent form, responding to both the bio-survey and post-survey, and fully participating in all four weeks of the study including the Pre-test, two treatment sessions and their associated tasks, and a Post-Test.

Table 9

Group Details

Groups	Subjects	Average Time Studying French
Group 1	13 (M=4, F=9)	3.1 years
Group 2	14 (M=1, F=13)	2.7 years
Group 3	14 (M=3, F=11)	3.6 years
Total	41 (M=8, F=33)	3.1 years

As outlined in Table 9, subjects were assigned to one of three different treatment groups. Group 1 had 13 subjects, 4 males and 9 females, who received treatment focusing on complexity developing activities involving transition words. Subjects in this group had already studied French for an average of 3.1 years. In Group 2, 14 subjects including 1 male and 13 females, received treatment that focused on the necessary content and grammar structures (pre-speaking) needed to facilitate oral responses to the prompt following the treatment session. This group's average years of experience studying French was 2.7 years prior to the current study. Finally, Group 3 had 14 subjects, 3 males and 11 females, and constituted a hybrid group of both of the previously mentioned teaching methods, including activities that focused on transition words and pre-speaking activities.

Group assignment was carried out as randomly as possible based on the availability subjects provided to the researcher and using a stratified random sample (see Table 9) so as to achieve 1) an equal number of participants within each group, 2) a similar gender ratio of across groups, and 3) a similar mixture of the participants' current instructors. The latter of these steps was intended to eliminate the teacher effect, however, ultimately, this effect cannot be fully avoided.

Having discussed the subjects and their group assignment, I now turn to a discussion of the instruments used in this thesis study.

Instruments

Background Questionnaire

Subjects completed a biosurvey administered online using Qualtrics to collect subject demographics such as age, past experience with the French language, and use of French on a daily basis. Additional questions elicited information regarding subjects' experiences and perceptions of the target culture as well as any other languages they had already had experience learning. A copy of the questions used in the biosurvey can be found in Appendix A. Due to time and space constraints, only age and past experience were considered for this thesis.

Oral Tasks

The tasks for this study were chosen based on content relevant to the subjects' current course work in their 3rd semester French classes. Each task was carefully considered to elicit rich and elaborate descriptions (an advanced function) using vocabulary and structures that the subjects had previous exposure to in their classes. At the time of this study, subjects were concluding a chapter in their textbook (*Imaginez*, 2007) on politics and justice, and tasks were chosen accordingly. The tasks outlined in Table 10 were taken from the subjects' textbook and were slightly modified to meet the needs of the study and are presented by the week in which subjects completed the tasks. All tasks are translated from French into English.

Table 10

Oral Tasks (Translated from French and Adapted from Imaginez, 2007)

Week	**Task**
Week 1: Pre-Test	What are the qualities of a good leader? Describe a leader that you know from your childhood (your parents, a teacher, etc.). Describe your experiences with this person.
Week 2: Treatment 1	You're creating a new civilization on a deserted island. What do you propose? What do politics look like? Justice? Why?
Week 3: Treatment 2	What are some political problems that exist in the United States or in the modern world? Describe a specific experience you've had (or someone that you know has had) with this problem.
Week 4: Post-Test	What are the qualities of a good president of the United States? Do you know somebody with these qualities? Talk about an experience you've had with this person.

The Pre- and Post-tests were intended to be similar to one another without being identical to help facilitate comparison of the two responses without simply repeating the prompt. All oral tasks were administered using NetRecorder in a computer laboratory in the Humanities Learning Resource Labs. Prior to answering the prompt, instructions were given to the subjects on the screen via NetRecorder and a microphone test was carried out for each subject. Following the microphone test, instructions appeared on the computer screen in English for completing the oral task, including a note that the subjects were not required to fill the entirety of the time allotted (5 minutes) with their responses.

Table 11

Prompt Instructions

Instructions
You will see a prompt appear on the screen. You will have 1 minute to read the prompt and may begin recording your response by clicking on the « Continue » button. At the end of 1 minute, the recording will automatically begin. You will have up to 5 minutes to respond to the prompt, however, don't feel inclined to use the entire time. You may end your response before the 5-minute limit by clicking on the « Finish » button. At the end of 5 minutes, the recording will automatically stop and the test will be over (your response will be saved). Click the "begin" button to see the prompt and begin the exam.

Once subjects were ready, the next screen showed the prompt. Subjects were given up to 1 minute to read the prompt without recording. At the end of the minute or when the subjects clicked to proceed to answer the prompt, they were given 5 minutes to complete their responses during which time the prompt remained on the screen.

Having outlined the role of the oral tasks in this study, I will now discuss the instruments used to carry out the treatments for each group in preparation to responding to these oral tasks.

Instruments Used During Treatments

Transition-based instruments used by both groups 1 (transitions) and 3 (transitions and pre-speaking). All subjects in Groups 1 and 3 received a copy of the transition words to be discussed during the session and used in the activities (see Appendix B for a copy of the words used). The three activities which both Groups 1 (transition words) and 3 (both transitions and pre-speaking) completed, namely cloze paragraphs, connecting sentences and expanding upon a single sentence, formed the sequence *cloze-connect-create* that is at the heart of Treatments 1 and 3. The purpose behind the following activities was, first, to activate necessary schema related to transition words (cloze), followed by subjects using transition words to logically order sentences (connect), and, finally, have subjects expand on a single sentence using their own ideas

and given transition words (create). In the following subsections, I describe each of these three activities following a discussion of the transition words. The Pre-Speaking activity will be described in the next section providing the overview for Groups 2 and 3.

List of transition words used in treatments 2 and 3. The transition words for Treatments 1 and 2 were chosen to help students elaborate in a variety of ways during the oral tasks in terms of temporality (e.g., first, then, after, finally, etc.), causation (e.g., because, etc.), adding details (e.g., in addition to, concerning, etc.) and expressing opinions[4] (e.g., I think, in my opinion, etc.). Identical lists were given to subjects during both treatment sessions with the exception of 4 new transition words added for Treatment 2 (week 3 of study) to add variety while reinforcing the previous weeks' words. To see complete lists of the transition words used during both treatment sessions, see Appendix B.

Cloze paragraphs. The first instrument in this group was a cloze type paragraph, or a paragraph with "holes" for the subjects to fill in with details. For this study, the cloze paragraphs included blanks for subjects to fill in with transition words from the provided list to practice connecting ideas logically. The following example of a cloze paragraph was translated from French and was used as part of the study. To see the full cloze exercise in French, see Appendix C.

[4] Expressing opinions is an advanced function, as opposed to supporting them, which is considered a superior function. Our intent was simply to have subjects express opinions, not support them.

Table 12

Example of a Cloze Paragraph

Prompt: A favorite teacher
_____, my favorite teacher was very kind. He gave us homework, _____ he always gave us extra time to do it. _____, he took the time every day to read stories to us, _____, adventure stories or fantasy novels…"

This paragraph was created by the researcher and did not match the content of the oral prompt used following the treatment. As such, it was considered parallel to the oral task. A handout was prepared by the researcher beforehand to be given to all subjects in this group in connection with a handout containing transition words the subjects could use to fill in the blanks within the paragraph. A digital copy of the cloze paragraph was also included on a PowerPoint slide for the researcher to use during the follow-up of this activity.

Connecting sentences. For the second activity, the researcher prepared an envelope containing strips of paper with one transition word per strip of paper. These transition words matched those on the handout used in the previous activity. Within this same envelope, the researcher also prepared several individual sentences on strips of paper that were related to one another based on content. The following table (Table 13) shows an example of the sentences subjects connected using the list of transition words.

Table 13

Example of Sentences to be Connected

Sentence samples
Justice is important. Injustice cannot continue. Liberty is important in our society. Religion is important in our society. Religion is not important for our society. Religions are too extreme. Immigration is important. Immigrants have the right to come as they wish. Immigrants should not be allowed to come as they wish. Immigrants should come legally.

Subjects worked in groups to join sentences together using the transition words presented in their handouts. The intent was to have subjects focus on the act of connecting ideas using transition words rather than on developing the base sentences themselves.

Elaboration of a sentence. For the final activity in this group, a separate envelope was prepared containing just the transition words the subjects used during the previous two activities. These words were drawn at random from the envelope by the subjects and used to respond logically to a prompt previously prepared by the researcher. This helped subjects not only add a variety of possible transitions to connect sentences, but it also required them to elaborate and add the details necessary to make the sentences flow logically. The two example prompts, translated from French and provided by the researcher for the two treatment sessions, were as follows:

Table 14

Create Activity Prompts

Create Activity for Treatment 1 My new civilization is a democracy.
Create Activity for Treatment 2 My favorite teacher was someone nice.

For instance, during Treatment 1, the beginning sentence was “My new civilization is a democracy. . .” If the first transition word pulled by one of the students was “because”, the student might add “**because** this form of government allows all citizens to participate in politics.” Then the next subject would pick a transition word or phrase and would add to the narrative using the transition word or phrase they had pulled from the envelope.

Pre-speaking instruments used by both groups 2 (pre-speaking) and 3 (combination). The following paragraphs outline the pre-speaking instruments used in this study.

Pre-speaking activity. The pre-speaking activities used for both Groups 2 and 3 are inspired by Chantal Thompson’s prelude to conversation tested in Gaillard’s (2013) thesis, namely, activating the necessary background knowledge and anticipating the content needed to complete the tasks following the treatment.

Before meeting with subjects in Groups 2 and 3, the researcher prepared a two-column Word document containing content (left column) and structures or vocabulary (right column) to be anticipated with the subjects during treatment as part of teacher-led planning (cf. Chapter 1; Gaillard, 2013). The sample in Table 15 was used in Treatment 2.

Table 15

Pre-Speaking Example (Translated from French)

Prompt: Choose and describe a political problem that you've observed in the United States or in the world. Discuss the problem and consequences of this problem that you've observed.	
Content	Forms
What? Immigration	War, civil war, terrorism, injustice, famine, poverty, refugees, immigrants, legal, illegal, ISIS, border closures, finding work, peace, etc.
Who? Refugees and Immigrants	Immigrate, move, live, escape, leave, come, have the right to…
Where? Countries	Prepositions with countries → venir **DU** Mexique (m) → venir **DE** Syrie (f) → venir **DES** Philippines (p) → aller **AU** Canada (m) → aller **EN** France (f) → aller **AUX** Etats-Unis (p)
Why?	It's a problem *because*…

As illustrated, the content and language tools, i.e., grammatical forms and lexical items, were directly relevant to the task following the treatment and were organized in such a way as to activate the subjects' schema prior to performing the task. The researcher printed a copy of these two columns to be referenced during the treatment by the teacher only. As part of the treatment procedure, the researcher wrote all anticipated content and structures on the white board for the subjects to reference throughout the treatment session. For the full pre-speaking activities, see Appendix D.

Additional instruments used for all groups. The following paragraphs outline all other instruments used during this study.

Model. Finally, in preparation for the task to follow these activities, the researcher also prepared a sample response to be shown via PowerPoint. The same model was shown in each

group, regardless of treatment, immediately prior to going to the computer lab and responding to the prompt. To see this example, see Appendix D.

Post-Survey. All subjects completed a survey following the Post-Test. The survey elicited opinions from the subjects about the activities during the study including how helpful or enjoyable the treatments were. Furthermore, the survey asked about how much time the subjects spent using French, whether speaking, writing, reading, or listening, outside of the study. To see the entire post-survey used for this study, see Appendix E. In Chapter 5 of this thesis, subjects' perceptions of activity helpfulness and enjoyability will be assessed.

Procedure

Subjects participated in study activities once a week for four weeks. All subjects completed the same tasks during weeks 1 and 4 which comprised the Pre- and Post-Test activities. In what follows, I outline what subjects did during these weeks as well as during the treatment weeks (weeks 2 and 3). During the treatment weeks, it is worth nothing that subjects met in one of the multiple group meetings designated for their particular treatment group to accommodate student schedules and unexpected absences of students. The multiple sessions permitted the participation of as many subjects as possible. Regardless of whether subjects participated with the main group or in a supplemental session, the researcher created an identical treatment setting including, room[5], tasks, activities, and procedures. With that in mind, I now turn to a discussion of the procedure used in the study.

Week 1: Consent Form, Biosurvey and Pre-Test

Table 16 outlines the procedure followed by all groups during the first week of the study.

[5] For a few groups, the same room was not available for a supplementary session. In this case, the researcher selected another room, but maintained the other settings of the treatment group.

Table 16

Week 1 Procedure

Week	**Group**	**Procedure**
Week 1	All Groups: Consent form, Biosurvey and Pre-Test	1. Complete consent form biosurvey via Qualtrics (link sent in an email to all subjects by the researcher) 2. Complete Pre-test using NetRecorder at the computer lab

During the first week of the study, subjects completed the biosurvey via Qualtrics, which began by collecting the consent of the subject. After completing the online biosurvey and consent form, subjects completed the first oral response task using NetRecorder as outlined above in one of the university computer labs at their leisure.

Weeks 2 and 3: Treatments 1 and 2

During weeks 2 and 3, groups repeated their respective treatment both weeks. Thus, the procedure that follows applies to both treatment weeks with just the content of the activities changing between the two treatments.

Table 17

Weeks 2 and 3 Procedure

Week	**Group**	**Procedure**
Week 2 and 3	Group 1 (Transition Words)	1. Receive transition word handout 2. Cloze Activity (5 minutes) 3. Connect Activity (5 minutes) 4. Create Activity (5 minutes) 5. Model 6. Respond to task in the computer lab using NetRecorder (5 minutes)
	Group 2 (Pre-Speaking)	1. Teacher-led planning session (5 minutes) 2. Model 3. Respond to task in computer lab using NetRecorder (5 minutes)
	Group 3 (Combination)	1. Receive transition word handout 2. Cloze Activity (5 minutes) 3. Connect Activity (5 minutes) 4. Create Activity (5 minutes) 5. Teacher-led planning session (5 minutes) 6. Model 7. Respond to task in computer lab using NetRecorder (5 minutes)

Group 1 (transition words). At the beginning of the treatment, subjects received the handout with the transition words to be used during the treatment session and during the oral response following the session. Subjects were then given a cloze activity to complete individually for 5 minutes, using the transition words on the handout they had just received. At the end of 5 minutes, possible answers were solicited from the subjects. Next, subjects were broken up into small groups (3-4 subjects per group) to complete the Connect Activity (see above) in which they used transition words to connect pre-printed sentences and clauses. This activity also took 5 minutes. At the completion of this activity, one subject per group was asked to read their responses aloud to the other groups. Finally, the entire group was divided into two equal subgroups to complete the Create Activity, where subjects added onto one sentence using

the given transition words and introducing a logical clause. This activity lasted 5 minutes during which time subjects took turns drawing a new transition word from the envelope and using it to add details to the previous sentence(s). After having read each group's completed paragraph, the subjects returned to their seats and were presented with the oral prompt they would need to respond to at the end of the treatment session. A model response was provided during which the researcher drew attention to the use of transition words in the example to reinforce the transition word focus of the treatment. Immediately following the example response, the subjects went to the computer lab across the hall, where they responded to the oral prompt for up to 5 minutes using NetRecorder.

Group 2 (pre-speaking). For this treatment, the subjects received at the outset of the treatment session the oral prompt they would be asked to respond to at the conclusion of the session. Based on that prompt, the researcher walked students through the pre-speaking activity focusing on the content needed to respond to the prompt and the necessary structures or vocabulary needed to avoid mistakes and express the content. During the 5-minute planning session, the researcher solicited possible content and language tools from the subjects, creating a collaborative effort led by the teacher-researcher. Immediately following the planning, the subjects were shown the same model as the transition word group, but emphasis was directed towards the content and language tools of the model, and not on the transition words. At the conclusion of the treatment, the subjects went across the hall to respond to the prompt (up to 5 minutes) using NetRecorder.

Group 3 (transition words and pre-speaking). As a hybrid group of the two previous groups (transition words and pre-speaking), Group 3 followed the same procedures of the two previous groups, beginning with the activities from the transition word group (Group 1), namely

the Cloze, Connect and Create activities. After completing the transition word activities, the subjects were guided through the same pre-speaking activity used with Group 2 focusing on both the content and the necessary forms needed to respond to the prompt. Finally, during the presentation of the sample response to the oral prompt they would need to complete following the treatment, attention was drawn to both the use of transition words as well as the content and the structures needed to create a detailed oral response, i.e., the combined focus given to Groups 1 and 2. Then, as with the other groups, the subjects went across the hall to the computer lab to respond (up to 5 minutes) to the oral prompt using NetRecorder.

Week 4: Post-Test and Post-Survey

The fourth week of the study is outlined below in Table 18 for all groups.

Table 18

Week 4 Procedure

Week	**Group**	**Procedure**
Week 4	All Groups: Post-survey and Post-Test	1. Complete 5-minute task using NetRecorder at the computer lab 2. Complete post-survey via Qualtrics (link sent in an email to all subjects by the researcher)

During the final week of the study, subjects first completed the oral Post-Test using NetRecorder at their own convenience in the Humanities Testing Lab following the same procedure as with the previous tasks of this study. Finally, they filled out the online post-survey administered via Qualtrics using the emailed link.

Analysis

Following data collection, all recordings, i.e., the Pre-test, recordings from Treatments 1 and 2 and the Post-test were transcribed including all false starts, errors and fillers such as "um" and "uh" (cf. Gaillard, 2103). To see an example of transcriptions from each treatment group, see

Appendix F. These transcriptions were then analyzed in the following ways: duration of the recording from start of speaking to end of speaking in minutes and seconds, the occurrence of individual transition words, and total words per minute including fillers and pauses. The total number of transition words were further classified as "taught" (those which appeared on the list of transition words used in Treatments 1 and 2) and "untaught" (those which were not included in the treatments). This approach to measuring transition words is new in that it does not categorize them for analysis by *type* of transition, e.g., temporal, etc. as in other recent studies (Darweesh & Kadhim, 2016, Rivard, Minkala-Ntadi, Roch-Gagné & Gueye, 2017). This new approach was taken in hopes that it would demonstrate a direct relationship between the transition word treatment sessions and the use of the explicitly taught transition words during oral performance. All data were entered into an Excel spreadsheet for further analysis.

These data were then analyzed in terms of fluency and complexity as outlined below in Table 19. Fluency was analyzed in terms total words per minute, the total minutes having been calculated to include pauses, fillers, and false starts. The total word count, however, did not include false starts and fillers. Next, complexity was analyzed in terms of the total number of clauses without false starts or filler, or "pruned speech" (Geng & Ferguson, 2013), as well as total word count, words per clause, total transition words and the ratio of taught to untaught transition words. It's important to note as well that clauses were measured in terms of main clauses and subordinate clauses, including relative clauses.

Table 19

Dependent Variables Used in Data Analysis

Dependent Variable	**Analysis**
Fluency	* words per minute (including pauses, fillers, and false starts) * number of minutes
Complexity	* total transition words * ratio including taught transition word count (transition words taught during any given treatment session) to untaught transition word count (transition words not included in any treatment sessions) * total number of clauses using "pruned speech"[6] (Geng & Ferguson, 2013, p. 985; Foster & Skehan, 2000, p. 365) * words per clause * total word count

These data were then analyzed statistically using a repeated measures ANOVA to test for significance between the different groups, meaning Group 1 vs. Group 2 vs. Group 3, and between the different times, meaning Pre-Test vs. Treatment 1 vs. Treatment 2 vs. Post-Test. Where significance was found for group or time (treatment session), post hoc LSD analyses were conducted to specify where significance was found i.e. between which groups or between which treatment sessions. A second series of repeated measures ANOVA were run to compare Pre-Test vs. Treatment 2 (to determine full benefit of two weeks of treatments) and Pre-Test vs. Post-Test (to determine residual benefits of the treatments when scaffolding activities were not used). Similar post hoc LSD analyses were again run to determine significance between groups, time and a group by time interaction. With this in mind, I now turn to Chapter 4 where I present the

[6] In the studies listed here, the researchers used pruned speech to measure fluency, however, this study seeks to measure the discourse level at which subjects are producing speech despite pauses. Meanwhile, this study doesn't use pruned speech to measure fluency as it is measured by overall words per minute. Thus, pauses, fillers, and false starts are essential for indicating fluency in this study.

results of the statistical analyses before discussing what these results mean for our research questions in Chapter 5.

Chapter 4: Data

The following chapter presents the data of the current study as outlined in the analysis section of Chapter 3. I first report the data for complexity (taught transition words, ratio of taught to untaught transition words used, total number of clauses, total words and words per clause) followed by data for fluency (total minutes and words per minute). In both cases, I begin by reporting descriptive data followed by the results of inferential statistics, namely repeated measures ANOVAs to test for differences between groups and time (i.e., Pre-Test, Treatment 1, Treatment 2, and Post-Test), as well as any interactions between groups and time. When significance was found for any variable, post-hoc LSD analyses were also run for that variable to determine more specifically the source of that significance. As was mentioned in Chapter 3, Group 1 focused just on transition words while Group 2 focused on pre-speaking activities. Group 3, on the other hand, combined the activities from both Groups 1 and 2. With this in mind, I now turn to the results for various aspects of complexity discussed in this thesis.

Results for Complexity

Since this study measures aspects of transition words and clauses as indicators of complexity, I show detailed descriptive data and the statistics of a repeated measures ANOVA for total transition words, total transition words to total words count (type-token ratio) and taught to untaught transition words (type-token ratio). As noted above, where significance was found, a post-hoc LSD analysis was conducted to determine which aspect of each variable was significant. These same statistical analyses were also conducted for clauses and are reported following the transition word statistics in the following section.

Total transition words. The table below details the descriptive data collected for total transition words across the three treatment groups. In addition to means given for each of the

groups, an overall mean is included at the bottom of the table to show overall differences between times.

Table 20

Descriptive Data for Total Transition Words

Group		Time 1 Pre-Test	Time 2 Treatment 1	Time 3 Treatment 2	Time 4 Post-Test
Group 1 (N=13) Transition Word	Mean	18.54	21.615	19.538	21.692
	Std. Deviation	11.82	7.2748	7.1135	13.2375
	CI: Lower	12.115	17.660	15.671	14.496
	CI: Upper	24.965	25.570	23.405	28.888
Group 2 (N=14) Pre-Speaking	Mean	11.929	20.643	18.786	16.929
	Std. Deviation	6.3545	8.3905	7.8562	8.2785
	CI: Lower	8.600	16.248	14.671	12.593
	CI: Upper	15.258	25.038	22.901	21.265
Group 3 (N=14) Combination	Mean	12.571	17.357	23.571	20.929
	Std. Deviation	7.978	9.2288	9.0953	8.0237
	CI: Lower	8.392	12.523	18.807	16.726
	CI: Upper	16.750	22.191	28.335	25.132
Total (N=41)	Mean	14.244	19.829	20.659	19.805
	Std. Deviation	9.1972	8.3573	8.1689	10.013
	CI: Lower	11.429	17.271	18.159	16.740
	CI: Upper	17.059	22.387	23.159	22.870

A repeated measures ANOVA for total transition words found no significant effect for group [$F(2, 38)=0.741$, $p=0.483$, partial $\eta^2= 0.038$]. However, a repeated measures ANOVA found a significant difference for time [$F(3, 114)=8.605$, $p<0.001$, partial $\eta^2=0.185$], i.e., when students completed the tasks. To see the effect of each time, including treatment, a post hoc LSD analysis was conducted revealing a significant difference ($p<0.001$) between the Pre-test (mean of 14.24 transition words) and all other times, i.e., Treatments 1 (19.82 mean transition words) and 2 (20.65 mean transition words) and the Post-test (19.81 mean transition words). In other

words, the subjects used on average 5 transition words more in their responses to the oral prompts following the treatments and during the Post-test than they had during the Pre-test.

It is also worth noting that a two-way interaction was found to be significant for time and group [$F(6, 114)=2.339$, $p=0.036$, $\eta^2=0.110$].

A second series of repeated measures ANOVA were run to compare the use of total transition words from the Pre-Test to Treatment 2. This analysis revealed that there was no significance between groups [$F(2, 38)=1.024$, $p=0.396$, $\eta^2=0.051$], however, there was a significant difference between the two times [$F(1, 114)=16.864$, $p<0.001$, $\eta^2=0.307$]. Furthermore, there was a significant interaction between group and time [$F(4, 114)=3.535$, $p=0.039$, $\eta^2=0.157$].

A final series of repeated measures ANOVA were run to compare the use of total transition words in the Pre-Test responses to the Post-Test. This analysis revealed that there was no significance between groups [$F(2, 38)=1.455$, $p=0.246$, $\eta^2=0.071$] nor in the interaction between group and time [$F(4, 114)=1.956$, $p=0.216$, $\eta^2=0.077$]. There was, however, a significant difference between the two times [$F(1, 114)=20.922$, $p<0.001$, $\eta^2=0.355$].

Figure 1 (below) illustrates the estimated marginal means (adjusted by SPSS to account for differences in group size) of the total number of transition words across treatment groups for each time or oral response, e.g., Pre and Post-Tests, treatment sessions. In this figure, and in other figures in this chapter, the numbers indicating time are referenced as follows: 1 is the Pre-Test, 2 is Treatment 1, 3 is Treatment 2, and 4 is the Post-Test.

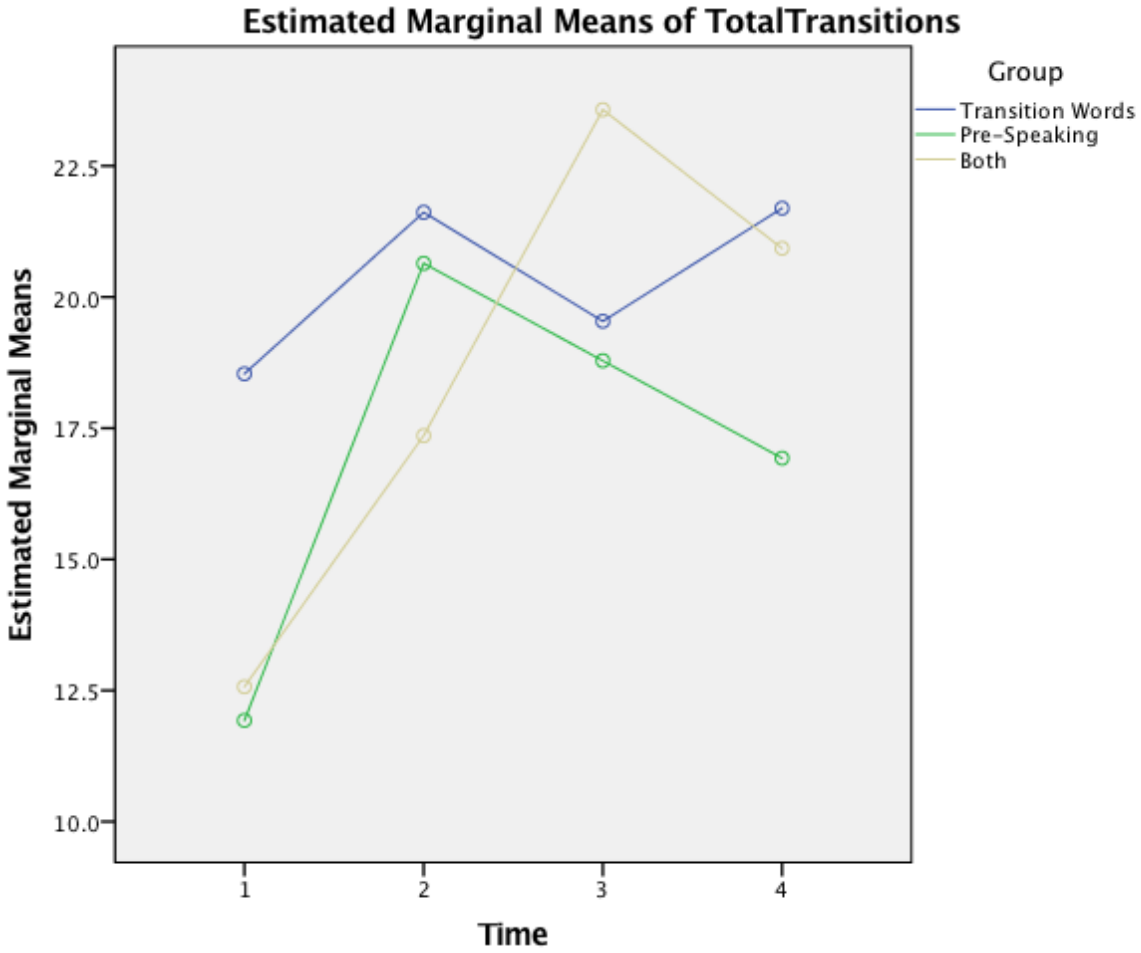

Figure 1. Average means of total transition words for each group across different treatments.

Figure 1 illustrates the significant increase in transition word use across treatment groups from the Pre-test to all other treatment times. It also demonstrates a substantially higher starting point for Group 1 (Transition Word group), a higher use of transition words by Group 3 after Treatment 2, followed by a decline in use of transition words by both Groups 2 and 3 compared with an increase by Group 1 during the post-test.

Type token ratio: taught transitions to untaught transitions. Table 21 below presents the descriptive data for the type-token ratio comparing taught transition words[7] to untaught

[7] Taught transition words constituted transitions that were actually taught during any of the times to Groups 1 and 3, including their use during the Pre and Post-tests. Although these words were not formally presented to Group 2 (Pre-speaking group), their use of the taught transition words was accounted for.

transition words[8]. In this case, the decimals represent a ratio of taught transition words to untaught transition words. For instance, if a subject used 10 taught transition words to 20 untaught transition words, the ratio would be 0.5.

Table 21

Descriptive Data for Type-Token Ratio: Taught Transition Words to Untaught Transition Words

Group		Time 1 Pre-Test	Time 2 Treatment 1	Time 3 Treatment 2	Time 4 Post-Test
Group 1 (N=13) Transition Word	Mean	0.150	0.451	0.443	0.352
	Std. Deviation	0.144	0.123	0.136	0.153
	CI: Lower	0.072	0.384	0.369	0.269
	CI: Upper	0.229	0.518	0.517	0.435
Group 2 (N=14) Pre-Speaking	Mean	0.239	0.399	0.387	0.347
	Std. Deviation	0.129	0.213	0.112	0.128
	CI: Lower	0.171	0.287	0.328	0.280
	CI: Upper	0.307	0.510	0.445	0.414
Group 3 (N=14) Combination	Mean	0.362	0.531	0.441	0.412
	Std. Deviation	0.167	0.212	0.081	0.100
	CI: Lower	0.275	0.420	0.398	0.360
	CI: Upper	0.450	0.642	0.484	0.464
Total (N=41)	Mean	0.253	0.460	0.423	0.371
	Std. Deviation	0.168	0.192	0.112	0.128
	CI: Lower	0.202	0.402	0.389	0.331
	CI: Upper	0.305	0.519	0.457	0.410

A repeated measures ANOVA found significance between groups [$F(3,114)=18.272$, $p<0.001$, partial $\eta^2= 0.325$]. To see the effect of group, a post hoc LSD analysis was conducted revealing a significant difference between Group 1 and Group 3 ($p=0.012$) where Group 3 used a higher number of taught transitions (mean across all times = 0.437) than Group 1 (mean across times = 0.349). A significant difference was also found between Groups 2 and 3 ($p=0.006$) where

[8] Untaught transition words constituted any other transition words used that were not explicitly taught to any groups during any of the times.

Group 3 had a higher overall use of taught transition words to untaught transition words (mean across all times = 0.437) compared to Group 2 (mean across all times = 0.343). In other words, overall, Group 3 used significantly more transition words than both Groups 1 and 2.

A repeated measures ANOVA found also found significance between treatment times [$F(2, 38)=14.092$, $p=0.001$]. To see the effect of different treatment times, a post hoc LSD analysis was conducted revealing a significant difference between taught and untaught transition words from the Pre-test to Treatment 1, from the Pre-test to Treatment 2, and from the Pre-test to the Post-Test ($p<0.001$). There were also significant differences between Treatment 1 and the Post-Test ($p=0.012$) and Treatment 2 and the Post-Test ($p=0.022$), the Post-Test showing lower means of taught transition words being taught compared to untaught transitions (mean=0.371). No significance was found for the interaction between time and group [$F(6,114)=1.698$, $p=0.128$, $\eta^2= 0.082$].

Figure 2 (below) shows the means of the taught to untaught transition word ratios for each group across the different times

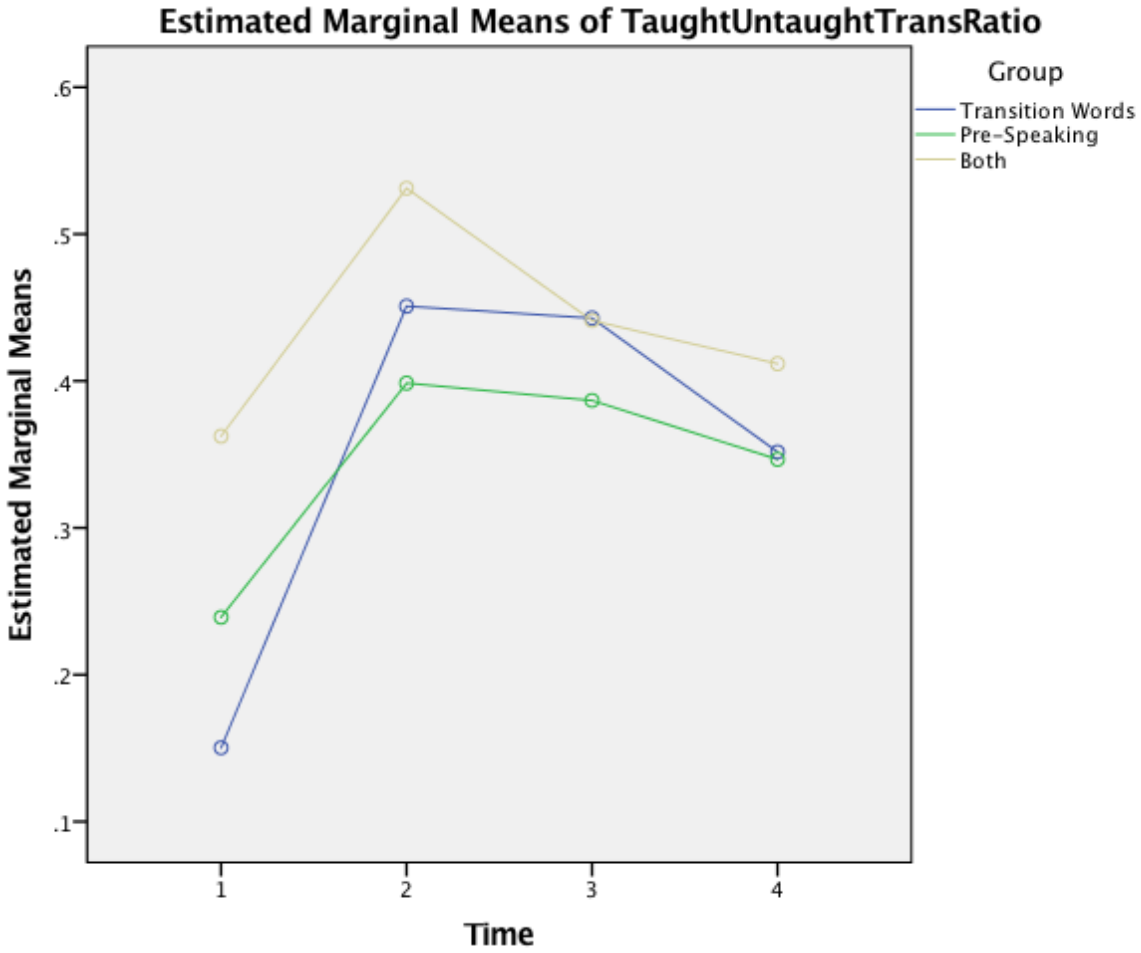

Figure 2. Means for the type-token ratio of taught transition words compared to untaught transition words for each group across times.

Figure 2 illustrates the significant increase of taught transition word use to untaught transition word use from the Pre-test to all other treatment times regardless of group. That said, all groups peak in their taught to untaught ratio after Treatment 1 with a modest decline to both Treatment 2 and the post-test for all groups never returning to pre-test levels. No additional analyses were run for this factor.

Total clauses. Table 22 outlines the descriptive data for the total number of clauses for each group across the different treatment times. A total average is also shown of the number of clauses spoken across the different groups for each time.

Table 22

Descriptive Data for Total Clauses

Group		Time 1 Pre-Test	Time 2 Treatment 1	Time 3 Treatment 2	Time 4 Post-Test
Group 1 (N=13) Transition Word	Mean	28.308	27.231	27.846	29.000
	Std. Deviation	16.923	10.910	9.923	10.695
	CI: Lower	19.108	21.300	22.452	23.186
	CI: Upper	37.507	33.161	33.241	34.814
Group 2 (N=14) Pre-Speaking	Mean	17.429	27.571	27.286	25.714
	Std. Deviation	7.968	9.733	8.100	8.561
	CI: Lower	13.255	22.473	23.043	21.230
	CI: Upper	21.603	32.670	31.528	30.199
Group 3 (N=14) Combination	Mean	19.143	24.429	32.429	27.857
	Std. Deviation	9.105	11.620	13.357	9.147
	CI: Lower	14.373	18.342	25.432	23.066
	CI: Upper	23.912	30.516	39.425	32.649
Total (N=41)	Mean	21.463	26.390	29.220	27.488
	Std. Deviation	12.502	10.604	10.695	10.505
	CI: Lower	17.637	23.144	25.946	24.272
	CI: Upper	25.290	29.636	32.493	30.703

A repeated measures ANOVA found no significance in the total number of clauses between groups [$F(2,38)=0.508$, $p=0.606$, partial $\eta^2=0.026$]. For time, however, there was a significant difference [$F(3,114)=9.283$, $p<0.001$, partial $\eta^2=0.196$]. A post hoc analysis revealed a significant different between the Pre-Test and Treatment 1 ($p=0.003$), the Pre-Test and Treatment 2 ($p<0.001$), and the Pre-Test and the Post-Test ($p<0.001$). Furthermore, a significant interaction was found between group and time [$F(6,114)=3.369$, $p=0.004$, partial $\eta^2=0.151$].

A second series of repeated measures ANOVA were run to compare total clauses in the Pre-Test responses to the Treatment 2 responses. This analysis revealed that there was no significant difference between groups [$F(2, 38)=1.185$, $p=0.317$, $\eta^2=0.059$], however, there was

a significant difference between the two times [$F(1, 114)=17.890$, $p<0.001$, $\eta^2=0.320$] and in the interaction between group and time [$F(4, 114)=5.227$, $p=0.010$, $\eta^2=0.216$].

A final series of repeated measures ANOVA were run to compare total clauses in the Pre-Test responses to the Post-Test responses. This analysis revealed that there was no significant difference between groups [$F(2, 38)=1.676$, $p=0.201$, $\eta^2=0.081$], however, there was a significant difference between the two times [$F(1, 114)=17.399$, $p<0.001$, $\eta^2=0.314$] and in the interaction between group and time [$F(4, 114)=3.314$, $p=0.047$, $\eta^2=0.149$].

The following figure (Figure 3) illustrates the means of total clauses for each group across the different times.

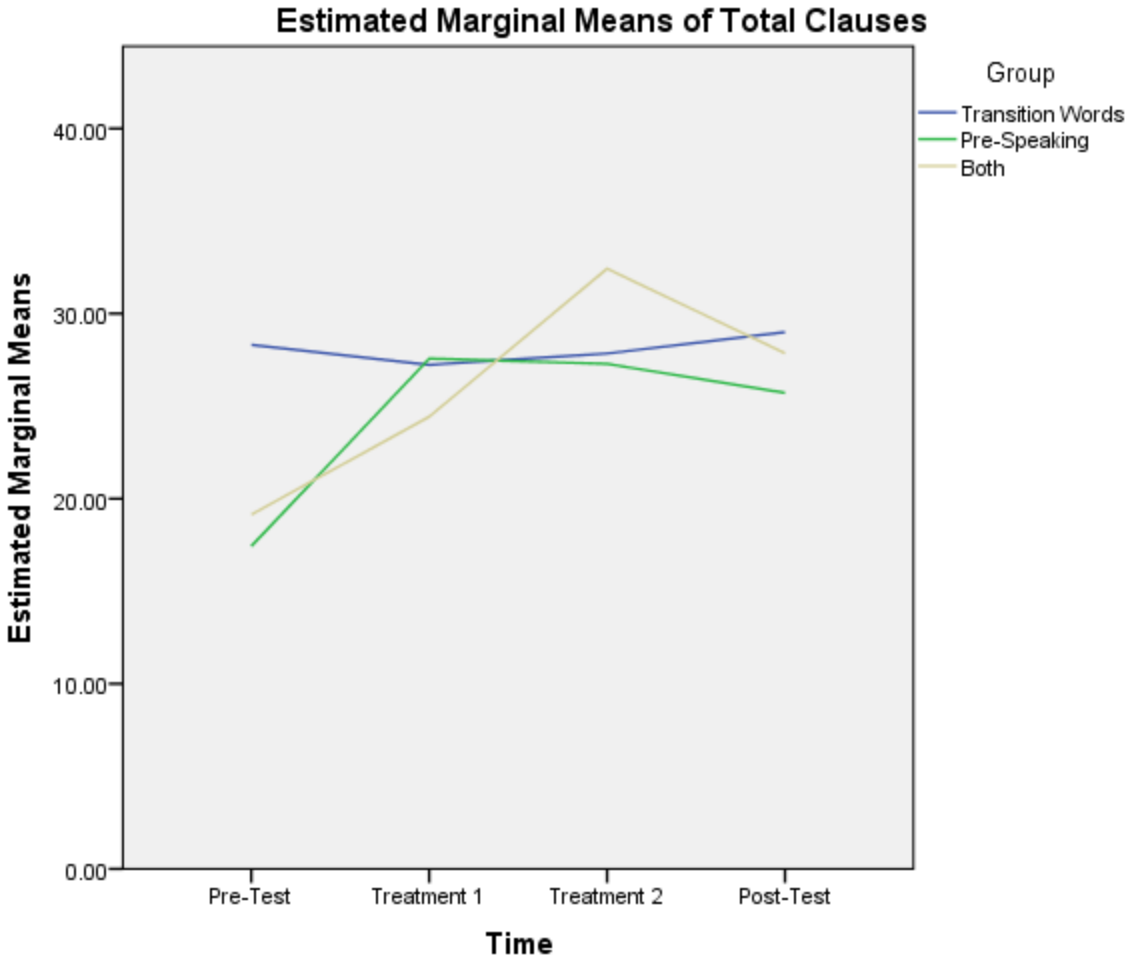

Figure 3. Means for total clauses spoken during each time by each group.

The figure above illustrates how, while the transition word group began and maintained a higher number of clauses from Pre-Test, the two other groups, including pre-speaking, showed the greatest gains in clauses across times, with Group 3 needing until Treatment 2 to exceed the other two groups before falling again at the Post-Test with the absence of scaffolding. This pattern is consistent with that found for total transition words above.

Total words. Table 23 below summarizes the descriptive data for the total words spoken on average in each group across the different recording times. A total average of word-use by the groups is also shown for each time following individual group statistics.

Table 23

Descriptive Data for Total Words

Group		Time 1 Pre-Test	Time 2 Treatment 1	Time 3 Treatment 2	Time 4 Post-Test
Group 1 (N=13) Transition Word	Mean	175.923	197.462	194.923	197.154
	Std. Deviation	101.977	65.398	59.640	92.812
	CI: Lower	120.489	161.912	162.503	146.702
	CI: Upper	231.357	233.012	227.343	247.606
Group 2 (N=14) Pre-Speaking	Mean	114.500	215.643	200.071	172.929
	Std. Deviation	45.667	68.917	61.006	67.234
	CI: Lower	90.578	179.543	168.115	137.710
	CI: Upper	138.422	251.743	232.027	208.148
Group 3 (N=14) Combination	Mean	132.571	182.000	213.500	192.000
	Std. Deviation	67.969	71.160	76.285	72.813
	CI: Lower	96.967	144.725	173.540	153.859
	CI: Upper	168.175	219.275	253.460	230.141
Total (N=41)	Mean	140.146	198.390	203.024	187.122
	Std. Deviation	77.235	68.344	65.044	76.733
	CI: Lower	116.505	177.470	183.114	163.634
	CI: Upper	163.787	219.310	222.934	210.610

A repeated measures ANOVA found no significant difference in the total word count between groups [$F(2,38)=0.230$, $p=0.795$, $\eta^2=0.012$]. Across times, however, a significant difference was found [$F(3,114)=17.342$, $p<0.001$, partial $\eta^2=0.313$] To specifically identify the significant differences in time, a post hoc LSD analysis was conducted and determined that there was a significant difference between the Pre-Test (140.15 words) and Treatment 1 (1.98.39) ($p<0.001$), the Pre-Test (140.15 words) and Treatment 2 (203.02 words) ($p<.001$), and the Pre-Test (140.15 words) and the Post-Test (187.12 words) ($p<0.001$). Finally, a repeated measures ANOVA was also conducted to determine a significant relationship between time and group, and the analysis found significance in the interaction [$F(6,114)=3.041$, $p=0.009$, partial $\eta^2=0.138$].

A second series of repeated measures ANOVA were run to compare the total words in the Pre-Test responses to the Treatment 2 responses. This analysis revealed that there was no significant difference between groups [$F(2, 38)=0.707$, $p=0.500$, $\eta^2=0.036$]. There was significance, however, between the two times [$F(1, 114)=33.290$, $p<0.001$, $\eta^2=0.467$] and in the interaction between group and time [$F(4, 114)=3.912$, $p=0.029$, $\eta^2=0.171$].

A final series of repeated measures ANOVA were run to compare the total words in the Pre-Test responses to the Post-Test responses. This analysis revealed no significance between groups [$F(2, 38)=1.235$, $p=0.302$, $\eta^2=0.061$] or in the group and time interaction [$F(4, 114)=1.947$, $p=0.157$, $\eta^2=0.093$]. There was a significant difference between the two times, however [$F(1, 114)=27.148$, $p<0.001$, $\eta^2=0.417$].

In Figure 4 below the means for total words spoken by each group are shown at each time.

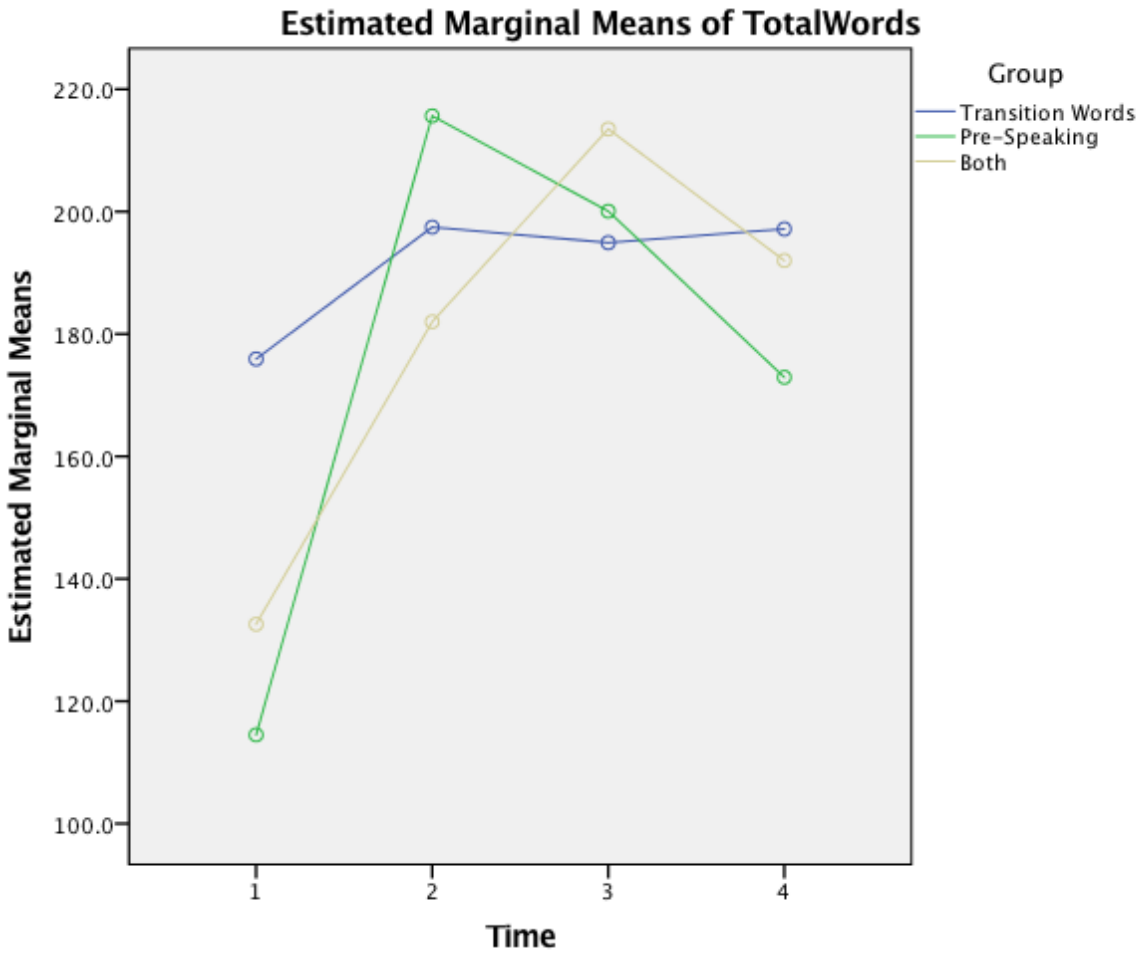

Figure 4. Means of total words spoken by each group for each time.

Figure 4 illustrates the significant increase in words spoken from the Pre-Test to all other times, especially for Groups 2 and 3 which made greater gains.

Words per clause. The following table (Table 24) gives the descriptive statistics for words per clause, including the average number of words per clause for each group across the different treatment times. Finally, as in the previous table, a total average of words per clause is given (an average between all of the groups) for each time (see Table 23).

Table 24

Descriptive Data for Words per Clause

Group		Time 1 Pre-Test	Time 2 Treatment 1	Time 3 Treatment 2	Time 4 Post-Test
Group 1 (N=13) Transition Word	Mean	6.270	7.436	7.150	7.014
	Std. Deviation	0.670	0.812	0.775	0.887
	CI: Lower	5.906	6.994	6.729	6.532
	CI: Upper	6.635	7.877	7.571	7.496
Group 2 (N=14) Pre-Speaking	Mean	6.825	7.993	7.375	6.650
	Std. Deviation	1.173	1.417	0.997	0.706
	CI: Lower	6.210	7.250	6.853	6.281
	CI: Upper	7.439	8.735	7.898	7.020
Group 3 (N=14) Combination	Mean	6.876	7.723	6.737	6.846
	Std. Deviation	1.140	1.141	0.803	0.950
	CI: Lower	6.279	7.126	6.317	6.348
	CI: Upper	7.473	8.321	7.158	7.344
Total (N=41)	Mean	6.666	7.724	7.086	6.832
	Std. Deviation	1.039	1.152	0.887	1.010
	CI: Lower	6.348	7.372	6.815	6.523
	CI: Upper	6.984	8.077	7.358	7.141

A repeated measures ANOVA found no significance for words per clause between groups [$F(2,38)=0.467$, $p=0.630$, $\eta^2=0.024$]. There was, however a significant difference between the different times [$F(3,114)=10.986$, $p<0.001$, partial $\eta^2=0.224$]. A post hoc analysis found significance between the Pre-Test (6.67) and Treatment 1 (7.72) ($p<0.001$) and the Pre-Test (6.67) and Treatment 2 (7.09) ($p=0.042$). It is worth noting, however, that although significant, the difference is equivalent to one word, thus statistically significant but in practical terms, not particularly large. Finally, no significant group by time interaction was found [$F(6,114)=1.506$, $p=0.182$, partial $\eta^2=0.073$].

A second series of repeated measures ANOVA were run to compare words per clause from the Pre-Test responses to the Treatment 2 responses. This analysis revealed that while there

was no significance found between groups [$F(2, 38)=1.171$, $p=0.321$, $\eta^2=0.058$] nor in the group and time interaction [$F(4, 114)=2.028$, $p=0.146$, $\eta^2=0.096$], significance was found between the two times [$F(1, 114)=4.317$, $p=0.045$, $\eta^2=0.102$].

A final series of repeated measures ANOVA were run to compare words per clause from the Pre-Test responses to the Pre-Test responses. This analysis revealed no significance between groups [$F(2, 38)=0.217$, $p=0.806$, $\eta^2=0.011$], the two times [$F(1, 114)=0.765$, $p=0.387$, $\eta^2=0.020$], nor in the interaction between group and time [$F(4, 114)=1.957$, $p=0.155$, $\eta^2=0.093$].

Figure 5 (below) shows the means of words per clause for each group across the different times.

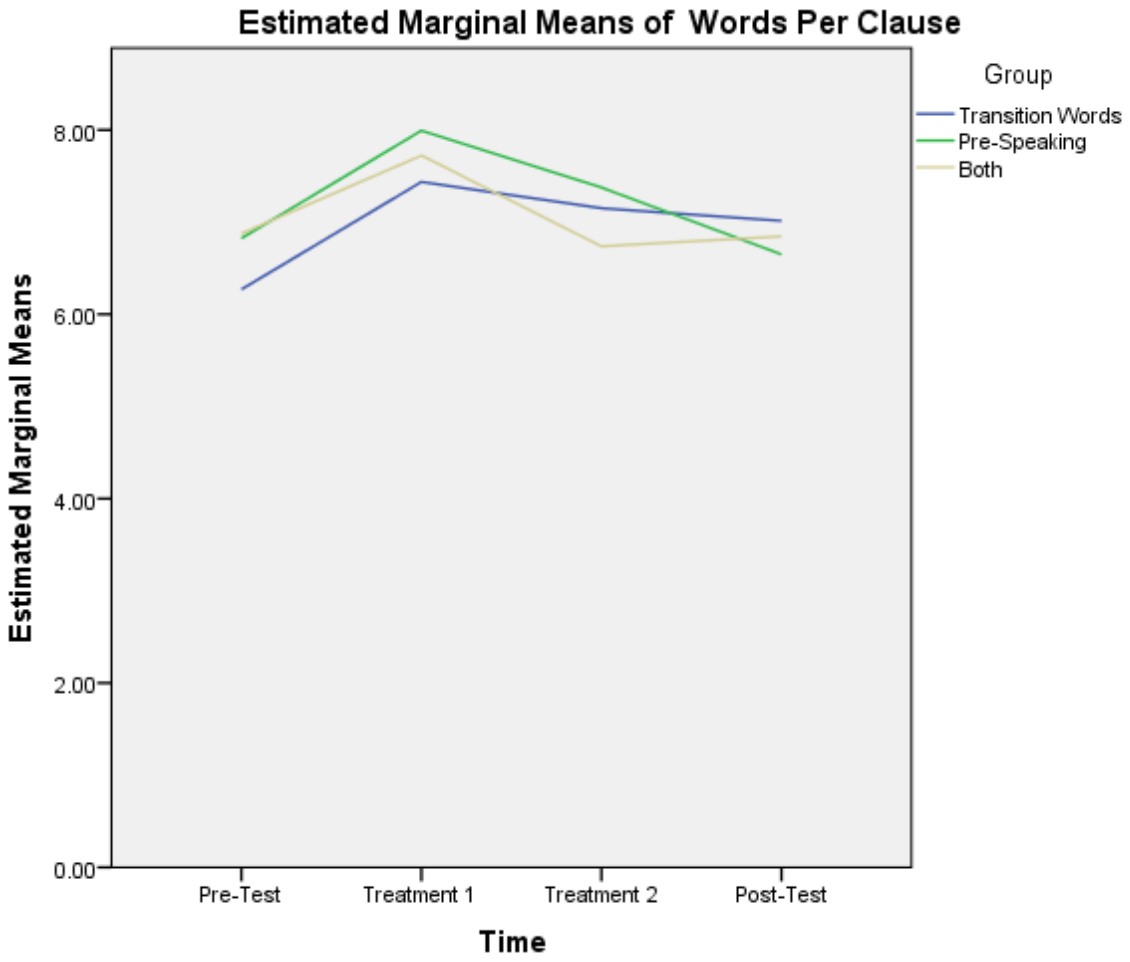

Figure 5. Means for total words per clause for each time by group.

Figure 5 shows the significant increases in words per clause across the groups from the Pre-Test to Treatment 1, then decreasing from Treatment 1 to Treatment 2, then to the Post-Test. Again, not only were the findings for the Post-Test similar to those for the Pre-Test, but any significant increases or decreases between times represented less than a word difference.

Results for Fluency

I now turn to the results for fluency, namely total minutes, total word count, and words per minute. The same analyses were conducted as with the variables pertaining to complexity i.e.

a repeated measures ANOVA for each variable, followed by an LSD post hoc test to indicate specific significance within the variable as needed.

Total minutes. Table 25 below outlines the total amount of time subjects spoke on average in each group and across the different times in terms of minutes. An average of all of the groups' means is also shown in this table for each time.

Table 25

Descriptive Data for Total Minutes

Group		Time 1 Pre-Test	Time 2 Treatment 1	Time 3 Treatment 2	Time 4 Post-Test
Group 1 (N=13) Transition Word	Mean	2.922	3.088	2.877	3.018
	Std. Deviation	1.367	0.609	0.780	0.920
	CI: Lower	9.179	2.758	2.453	2.518
	CI: Upper	10.665	3.419	3.301	3.518
Group 2 (N=14) Pre-Speaking	Mean	2.568	4.049	3.333	3.108
	Std. Deviation	1.053	0.910	0.859	0.997
	CI: Lower	2.016	3.572	2.883	2.586
	CI: Upper	3.120	4.525	3.783	3.630
Group 3 (N=14) Combination	Mean	2.876	3.897	3.751	3.868
	Std. Deviation	1.229	1.278	1.165	1.117
	CI: Lower	2.232	3.228	3.141	3.283
	CI: Upper	3.520	4.567	4.361	4.453
Total (N=41)	Mean	2.785	3.693	3.331	3.339
	Std. Deviation	1.199	1.043	0.996	1.064
	CI: Lower	2.418	3.373	3.026	3.013
	CI: Upper	3.152	4.012	3.636	3.665

A repeated measures ANOVA found no significance in the number of minutes between groups [$F(2,38)=1.698$, $p=0.197$, $\eta^2= 0.082$]. This same analysis was conducted for treatment times and a significant difference was confirmed [$F(3,114)=12.689$, $p<0.001$, $\eta^2=0.250$] . To specifically determine the source of this significance, a post hoc LSD analysis was conducted revealing significance between the Pre-Test (2.79 minutes) and Treatment 1 (3.69 minutes)

(p<0.001), the Pre-Test (2.79 minutes) and Treatment 2 (3.33 minutes) (p=0.005), and the Pre-Test (2.79 minutes) and the Post-Test (3.34 minutes) (p<0.001). There was also a significant difference in minutes between Treatment 1 (3.69 minutes) and Treatment 2 (3.33 minutes) (p=0.010) and Treatment 1 (3.69 minutes) and the Post-Test (3.34) (p<0.001). As for the relationship between group and time, a repeated measures ANOVA found that the interaction was significant [$F(6,114)=3.377$, p=0.004, partial $\eta^2=0.151$].

A second series of repeated measures ANOVA were run to compare the total minutes spoken from the Pre-Test responses to the Treatment 2 responses. This analysis revealed that there was no significant difference between groups [$F(2, 38)=0.805$, p=0.455, $\eta^2=0.041$]. Between the two times, however, there was a significant difference [$F(1, 114)=8.859$, p=0.005, $\eta^2=0.189$] and the interaction between group and time was approaching significance [$F(4, 114)=2.577$, p=0.069, $\eta^2=0.119$].

A final series of repeated measures ANOVA were run to compare the total minutes spoken from the Pre-Test responses to the Post-Test responses. This analysis revealed that there was no significance between groups [$F(2, 38)=1.010$, p=0.374, $\eta^2=0.050$], however, there was a significant difference between these two times [$F(1, 114)=15.786$, p<0.001, $\eta^2=0.293$] and the interaction between group and time [$F(4, 114)=3.542$, p=0.039, $\eta^2=0.157$].

Figure 6 (below) illustrates the means of total minutes for each group during each time.

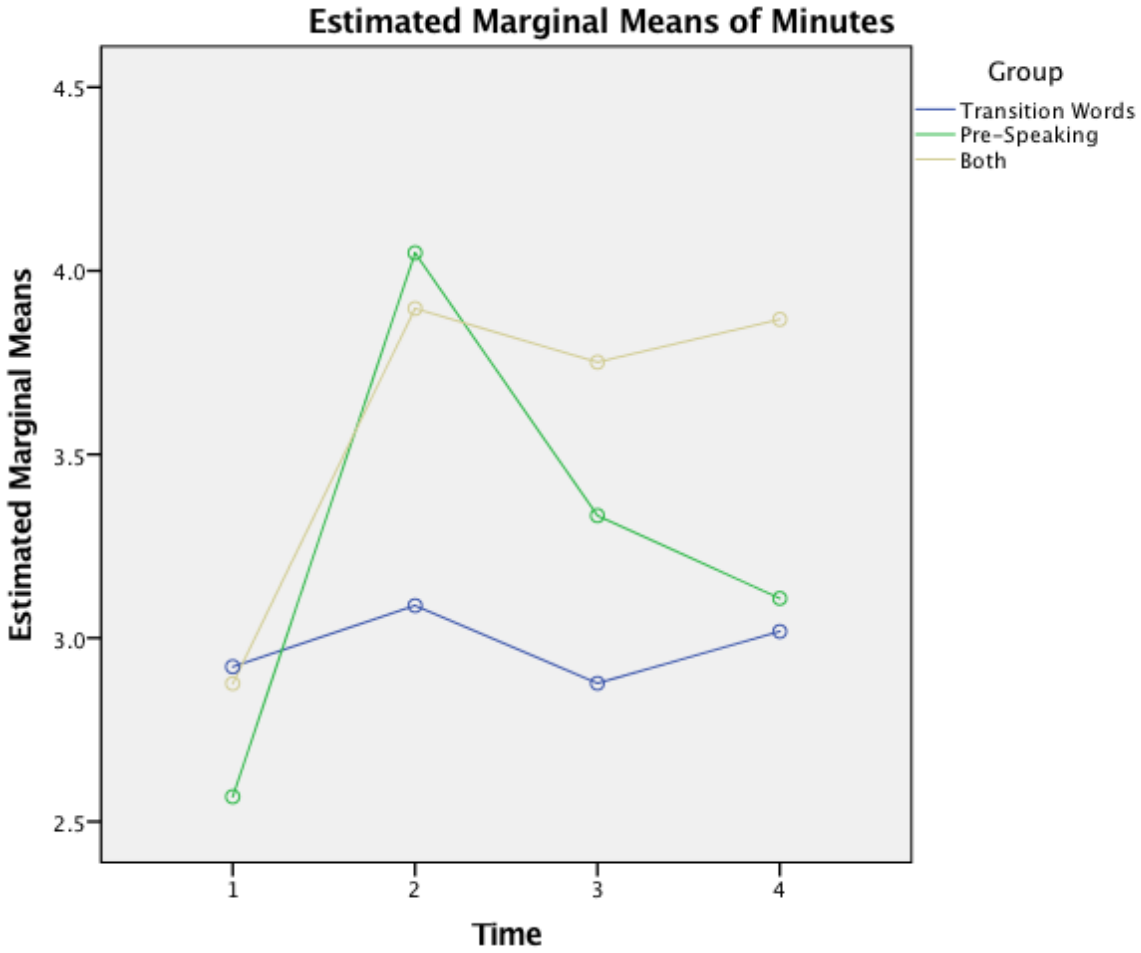

Figure 6. Means of total minutes spoken in each group for each time.

This figure shows the increase in the number of minutes from the Pre-test to all other treatments, regardless of group with the greatest increases for Group 3 by Treatment 1 and generally maintained across the remaining recording times as well as the substantial increase from the Pre-test to Treatment 1 for Group 2. It also illustrates the consistent decrease in the number of minutes between Treatment 1 and Treatment 2 for all groups and the overall increase from Pre- to Post-test for all groups.

Words per minute. In this final table (cf. Table 26), the descriptive statistics are given for the total number of words per minute for each group across the different times. As with the

previous variables of complexity and fluency, this table also includes an overall average of the means for each group for each time (time).

Table 26

Descriptive Data for Words per Minute

Group		Time 1 Pre-Test	Time 2 Treatment 1	Time 3 Treatment 2	Time 4 Post-Test
Group 1 (N=13) Transition Word	Mean	58.313	63.522	68.513	64.002
	Std. Deviation	13.250	14.657	15.078	14.781
	CI: Lower	51.110	55.555	60.317	55.967
	CI: Upper	65.516	71.489	76.709	72.037
Group 2 (N=14) Pre-Speaking	Mean	46.145	53.314	60.753	56.285
	Std. Deviation	11.301	12.964	15.182	14.912
	CI: Lower	40.225	46.523	52.800	48.474
	CI: Upper	52.065	60.105	68.706	64.096
Group 3 (N=14) Combination	Mean	49.099	49.426	59.074	50.870
	Std. Deviation	18.187	17.196	16.286	14.573
	CI: Lower	39.572	40.418	50.543	43.236
	CI: Upper	58.626	58.434	67.605	58.504
Total (N=41)	Mean	51.012	55.223	62.640	56.883
	Std. Deviation	15.118	15.830	15.692	15.365
	CI: Lower	46.384	50.378	57.837	52.180
	CI: Upper	55.640	60.068	67.443	61.586

A repeated measures ANOVA found that total words per minute was approaching significance between groups [$F(2,38)=2.587$, $p=0.088$, $\eta^2=0.120$]. Between times, there was a significant difference [$F(3,114)=22.817$, $p<0.001$, $\eta^2=0.375$] A post hoc LSD analysis showed that there was a significant increase in words per minute between the Pre-Test (51.01 words/min) and Treatment 1 (55.22 words/min) ($p=.003$), the Pre-Test (51.01 words/min) and Treatment 2 (62.64 words/min) ($p<.001$), and the Pre-Test (51.01 words/min) and the Post-Test (56.88 words/min) ($p<.001$). There was also a significant increase between Treatment 1 (55.22 words/min) and Treatment 2 (62.64 words/min) ($p<.001$). Finally, there was a significant

decrease from Treatment 2 (62.64 words/min) and the Post-Test (56.88 words/min) (p=.001). Another repeated measures ANOVA found no significant interaction between time and group [F(6,114)=1.354, p=.239, partial η^2=.067].

A second series of repeated measures ANOVA were run to compare the number of words per minute in the Pre-Test responses to the Treatment 2 responses. This analysis revealed that there was no significance between groups [F(2, 38)=2.072, p=0.140, η^2=0.098] nor in the interaction between group and time [F(4, 114)=0.881, p=0.423, η^2=0.044], however, there was a significant difference between the two times [F(1, 114)=51.177, p<0.001, η^2=0.574].

A final series of repeated measures ANOVA were run to compare the number of words per minute in the Pre-Test responses to the Post-Test responses. This analysis revealed that the difference between the groups was approaching significance [F(2, 38)=2.602, p=0.087, η^2=0.120] as was the interaction between group and time [F(4, 114)=2.694, p=0.081, η^2=0.124]. There was also a significant difference between the two times [F(1, 114)=15.449, p<0.001), η^2=0.289].

In the figure below (Figure 7), the means for words per minute are illustrated for each group across the different times.

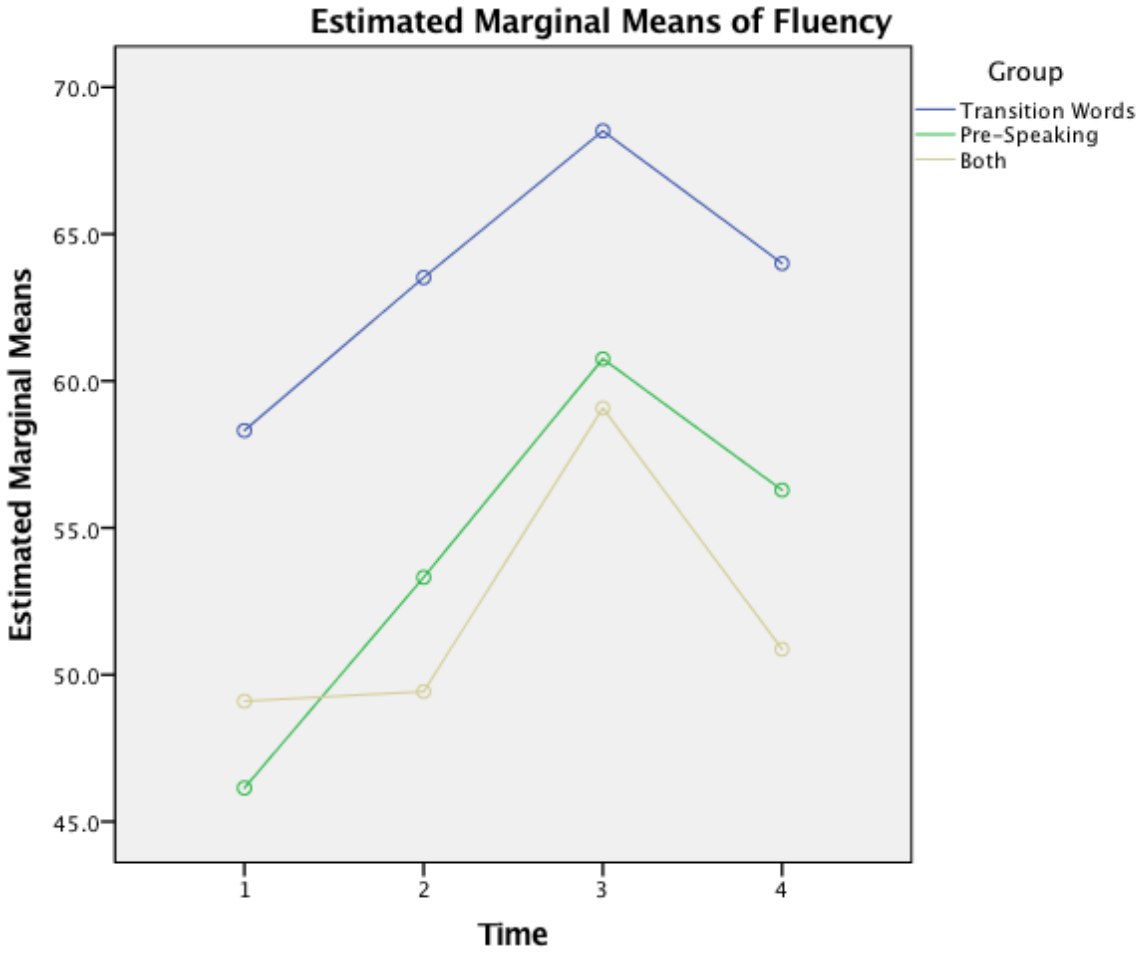

Figure 7. Means for words per minute for each group for each time.

In this figure, the significant increase in words per minute across the treatment groups, regardless of group, is shown. Not only does it show the increase in words per minute from the Pre-Test to all other treatments, including the increase from Treatment 1 to Treatment 2. Finally, it shows the significant decrease in words per minute from Treatment 2 to the Post-Test, however, without the averages for each group falling to the same Pre-test levels.

Conclusion

The data and statistics in this chapter have outlined the significance of the different variables used to measure complexity and fluency for each group and across the different times.

With these reports in mind, I now turn to a discussion of the statistics to answer the research questions and how these findings have implications for text type.

Chapter 5: Discussion

In this chapter, I answer each of the research questions in turn, based on the findings outlined in the previous chapter. For each question, I discuss the results as they pertain to fluency and complexity, and how those findings have implications for text type. Following a discussion of the research questions, I present a case study illustrating how fluency (in terms of words per minute) and complexity (in terms of clauses, word counts, and transition words for instance) combine to reflect an increase in text type towards paragraph level speech. As a reminder to the reader, the transition from strings of sentences to paragraph level speech involves an increase in not only clauses, but also transition words connecting those clauses, I submit. Consequently, increases in these aspects, e.g., word count, use of transition words, etc., will be interpreted as a reflection of increased text type for the purposes of this thesis. The case study is intended to demonstrate to the reader how these parameters play out in contributing to more cohesive and complex responses to the prompts. Following the case study, I turn to a discussion of the limitations of this study and provide suggestions for future research before outlining some pedagogical implications and concluding.

Discussion of Research Questions

To answer the research questions, this section will draw on the results presented in Chapter 4. The reader will recall that results were given in terms of complexity (as defined by the number and variety of transition words as well as the number of total words and clauses per response, i.e., quantity of speech) and fluency (as defined by duration of response as well as words per minute). An increase in these aspects of text type would be expected to result in more paragraph level speech.

To facilitate this discussion en route to answering the research questions, I discuss the results summarized in the tables below highlighting areas of significance between the groups and times (i.e., Pre-test, treatment sessions and Post-Test). In particular, I answer the research questions as they relate to each of the sub-components of complexity (RQ1) and fluency (RQ2) before ultimately answering each research question more globally for complexity and fluency respectively. RQ3 will in turn be answered by a case study illustrating how each of these components look in real terms as they reflect text type.

The research questions are intended to tease apart two separate yet related types of activities to facilitate increases in complexity and fluency to move students towards more paragraph-level speech. First, we examine whether pre-activities in general make a contribution. If there is an improvement from the Pre-Test scores to subsequent recording times, then this is interpreted to mean that, yes, the pre-activities do indeed result in an improvement. To answer the second part of the first two research questions, I then look more closely as to whether there is in particular an interaction between group by time. This would permit us to see whether at one particular time any of the groups differ from the other groups. If transition word activities are more beneficial than pre-speaking, then one would expect to see more improvements for Groups 1 and 3; if, on the other hand, pre-speaking activities better facilitate complexity, then one would expect Groups 2 and 3 to have greater improvements. However, if it is the combination of both transition word activities and pre-speaking activities, then one would expect to see Group 3 have the advantage over the other groups. With this in mind, I now turn to a discussion of the results.

RQ 1: Do transition word, pre-speaking activities, or a combination thereof have an effect on complexity in oral responses? If so, how? Is one type of activity, i.e. treatment, more beneficial than the other?

To answer RQ1 overall, I first outline how the individual sub-components contribute to our understanding of the impact of transition and pre-speaking activities on complexity as measured in this thesis. I begin by discussing total transition words used, the ratio of taught to untaught transition words, total clauses and finally words per clause.

Impact on Total Transition Words

As the reader will recall from Chapter 4 and repeated in Table 27 below, when all recording times were considered, there was no significant difference between the groups. There was, however, a significant interaction between group and time. Recall that while all groups increased between the Pre-Test and Treatment 1, only Group 3 continued making improvements by Treatment 2. By the Post-Test, both Groups 1 and 3 used substantially more transition words than Group 2 with the largest gains made overall by Group 3.

Table 27

Significance for Total Transition Words

Answer to RQ1 based on Total Transition Words	Basis of Comparison	Differences by Group	Differences by Time	Group x Time Interactions
Based on Significance: Yes, activities have impact *How:* *By end of treatments*: Pre-speaking leads to more improvements than transition words. *Without scaffolding* (*by Post-test*): All groups have improved over Pre-Test with no significant difference; no treatment is best.	Comparing all times	✖ p=0.483	✔ p<0.001 Pre-test scores were significantly lower (i.e., fewer transition words) from all other times.	✔ p=0.036 Group 1 only improved by 1 word; Groups 2 and 3 improved by about 7 and 11 respectively from the Pre-Test to Treatment 2. Decrease during Post-Test (no scaffolding).
	Pre-Test vs. Treatment 2	✖ p=0.396	✔ p<0.001 Confirms above	✔ p=0.039 Confirms above
	Pre-Test vs. Post-Test	✖ p=0.246	✔ p<0.001 Confirms above	✖ p=0.216 Interaction disappears

✖= no signficance
✔= signficant

Since the source of this significant interaction between time and group was unclear, further analyses comparing the Pre-Test responses against both Treatment 2 and Post-Test recordings were run. These revealed that group was not a significant factor. Moreover, the significant difference of Treatment 2 and Post-Test scores from Pre-Test was again confirmed. What is most critical, however, is the finding of a significant time by group interaction for the comparison between the Pre-Test and Treatment 2. In particular, Group 1 only improved by the addition of one transition word on average from the Pre-Test to Treatment 2. On the other hand, Groups 2 and 3 improved by about 7 and 11 transition words respectively on average by the end

of Treatment 2. However, when Post-Test scores were compared against the Pre-Test scores, the significant group by time interaction disappeared, suggesting that the scaffolding provided by the pre-speaking treatment provided the means by which subjects were able to increase in transition word use to reach similar levels to those exhibited by the transition word group. This finding should be taken with a grain of salt since Group 1, i.e., the transition word group was already using a higher number of transition words on average at the outset of the study (18.5), leaving less room for improvement. This is noted below in Table 28. It is also worth noting that this group demonstrated a larger variation across subjects during both the Pre- and Post-Test responses as indicated by the larger standard deviation (Pre 11.82, Post 13.24) than found for Group 2 (Pre 6.35, Post 8.28) and Group 3 (Pre 7.98, Post 8.02). Nevertheless, Group 3, which underwent both pre-speaking and transition word activities, went on to surpass the usage of transition words by the end of Treatment 2 on average, using a mean of 23.6 transition words and indeed making the largest gains from the Pre-Test to the Post-Test for total transition words as outlined below in Table 28:

Table 28

Increase in Transition Words from Pre- to Post-Test

	Group 1	Group 2	Group 3
Increase	3.152	5	8.358
Pre- to Post	18.54-21.69	11.93-16.93	12.57-20.93

Incidentally, Group 3's increase is roughly equivalent to the combined increases of Groups 1 and 2. Although group was not found to be significant, Group 3, whose pre-test average was almost 6 full transition words fewer than Group 1, increased its number of transition

words to an average more closely similar to that of Group 1 by the Post-Test. Meanwhile, Group 2, which did not practice transition word activities, also did not make the same improvements.

Thus, by the end of the treatments, complexity in terms of total transition words does appear to be influenced by pre-activities where the two groups which underwent pre-speaking activities, namely Groups 2 and 3, made the greatest gains in transition word use. However, by the end of the study when no pre-activities were used, there was no significant time x group interactions. Thus, while, the two transition word groups, i.e., Groups 1 and 3 had the highest average use of transition words, the increase over the course of the study by group was not significant.

Impact on Ratio of Taught to Untaught Transition Words

Although there was a significant difference between groups, where Group 3 consistently used a higher proportion of taught to untaught transition words throughout the study even before the treatments began (see Table 29 below), it was Group 1 that made on average the largest increase in from 15% at Pre-Test to 35% by the Post-Test.

Table 29

Significance for Ratio of Taught to Untaught Transition Words

Answer to RQ1 based on Ratio of Taught to Untaught Transition Words	Basis of Comparison	Differences by Group	Differences by Time	Group x Time Interactions
Based on Significance: Yes, activities have impact How: *By end of treatments and study:* All treatments led to increase in the use of taught vs. untaught transition words (including the pre-speaking alone group). *Trends:* Group 3 uses a higher proportion of taught to untaught transitions than other groups; Group 1 makes largest increase.	Comparing all times	✔ $p<0.001$ Group 3 used significantly greater proportion of taught to untaught transition words than Group 1 ($p=0.012$) and Group 2 ($p=0.006$).	✔ $p=0.001$ Proportion of taught to untaught transition words at Pre-Test significantly lower than all other times. Trmt 1 significant less than Post-Test ($p=0.012$) Trmt 2 significant less than Post-Test ($p=0.022$).	✖ $p=0.128$

✖= no signficance
✔= significant

Since no interaction was found between group and time, further analyses were not carried out. Indeed, as summarized in Table 29, Group 3 used more taught transition words from the beginning and thus made the smallest increase in taught vs. untaught transition words. In short, Group 3 started with 36% ratio vs. 15% for Group 1 and 24% for Group 2, leaving less room for overall improvement (see Table 30).

Table 30

Increases in Taught-Untaught Transition Ratio Given in Percentages

Group	Pre-Test	Treatment 1	Treatment 2	Post-Test	Increase Pre-Post
1	15%	45%	44%	35%	20%
2	24%	40%	39%	35%	11%
3	36%	53%	44%	41%	5%

It is interesting to note that Group 2, having received no transition word pre-activities, still showed an increase in taught transition words for this study. This may have been due to the example shown to all subjects immediately prior to responding to the prompt which contained many of the transition words taught to Groups 1 and 3 and which commonly appear in texts to which they have regular exposure in their French classes, e.g., *parce que, puis, ensuite*, etc.

In sum, all pre-activities in general had a significant impact on the ratio of taught to untaught transition words by the end of the treatments and Post-Test. In other words, it is not one particular type of activity, but rather than presence of pre-activities that permitted an increase in the ratio of taught transition words to untaught transition words.

Impact on Total Clauses

As Table 31 outlines for total clauses, there was no significance for group in differences between total number of clauses produced. However, a significant difference was found for time and for the interaction between time and group.

Table 31

Significance for Total Clauses

Answer to RQ1 based on Total Clauses	Basis of Comparison	Differences by Group	Differences by Time	Group x Time Interactions
Based on Significance: Yes How: *By end of treatments and study:* Pre-speaking led to greatest increase in clauses. *Trends*: Groups 2 and 3 produced a higher number of clauses in all times over the Pre-Test, while Group 1 saw a decrease from Treatments 1 and 2, then a increase to the Post-Test.	Comparing all times	✖ p=0.606	✔ p<0.001 There was a significant difference between the Pre-Test and all other times regardless of group.	✔ p=0.004 This significant interaction is derived from Groups 2 and 3, where there was an increase in clauses from the Pre-Test to all other times; however, Group 1 began with a higher number of clauses in the Pre-Test.
	Pre-Test vs. Treatment 2	✖ p=0.317	✔ p<0.001 Confirms above	✔ p=0.010 Confirms above
	Pre-Test vs. Post-Test	✖ p=0.201	✔ p<0.001 Confirms above	✔ p=0.047 Confirms above

✖= no signficance
✔= signficant

As outlined in the table above, there was no significant difference between groups. However, a significant difference in means based on time was found where scores tended to increase over the study. Likewise, there was an interaction between group and time when all times were compared against one another in general as well as when the Pre-Test scores were compared against both the Treatment 2 and Post-Test scores. This group by time interaction leads to two observations. First, at the outset of the study, Groups 2 and 3 produced substantially fewer clauses than Group 1. Thus, while Group 1's average number of clauses remained fairly similar falling by 0.46 clauses by Treatment 2, Groups 2 and 3 during the same period made

increases in the number of clauses they produced (increases of 9.8557 for Group 2 and 13.2886 for Group 3). By the end of the study when subjects responded to prompts without the benefit of pre-activities, i.e., scaffolding, the gains made by Groups 2 and 3 in comparison to the Pre-Test fell modestly to just 8.28 and 8.72 clauses on average respectively. During the same time period Group 1's average clause production continued to remain constant rising by less than a single clause (0.69 clauses). Thus, pre-speaking activities completed by Groups 2 and 3 (either alone or in conjunction with transition activities respectively) resulted in an increase in clause output compared with the Pre-Test. Indeed, it is also critical to note that the total number of clauses never fell back to Pre-Test levels, even when scaffolding was not present prior to subjects completing the Post-Test. In sum, while there is no evidence that transition word activities alone lead to increased clause output, there is evidence that pre-speaking either alone (Group 2) or in conjunction with transition word activities (Group 3) led to increased clause output.

Impact on Total Words

As stated in Chapter 4, there was no significance between the different teaching methods, i.e., between groups. However, there was significance for the different times as well as a significant interaction between group and time. The table below (Table 32) outlines these findings.

Table 32

Significance for Total Words

Answer to RQ1 based on Total Words	Basis of Comparison	Differences by Group	Differences by Time	Group x Time Interactions
Based on Significance: Yes How: *By end of treatments*: Pre-speaking leads to substantially higher increases in word count than transition activities alone. *Without scaffolding (by Post-Test):* Pre-speaking results in larger increases but interaction is not significant	Comparing all times	✖ p=0.795	✔ p<0.001 There was a significant increase in word count from the Pre-Test to all other times.	✔ p=0.009 While Groups 1 (modestly) and 2 (more substantially) decreased in total word output from Treatment 1 to Treatment 2, Group 3 increased word output between these two treatments before decreasing with the Post-Test, though without retreating to pre-test levels.
	Pre-Test vs. Treatment 2	✖ p=0.500	✔ p<0.001 With scaffolding, all groups used significantly more words over the Pre-Test.	✔ p=0.029 Group 1 uses more words total at Pre-Test (175.92) compared to Groups 2 and 3 (114.5 and 132.57); Groups 2 (200.07) and 3 (213.5) exceed Group 1 (194.9) by Treatment 2 marking increase of roughly 83 and 85 words for Groups 2 and 3 vs. 19 for Group 1.
	Pre-Test vs. Post-Test	✖ p=0.302	✔ p<0.001 Confirms above	✖ p=0.157

✖= no signficance
✔= signficant

While there was no significance between the different groups, there was a significant difference between the times, regardless of group, where the Pre-Test word output was significantly lower than all other times. In the interaction between group and time, however, it is

important to note how Groups 1 and 2 produced more words initially from the Pre-Test to Treatment 1 before producing fewer words during Treatment 2. Only Group 3 showed a continued increase from Treatment 1 to Treatment 2, where it surpassed both other groups in terms of total words. Because Group 3 produced fewer words than the other two groups during Treatment 1, the increase in word output in Treatment 2 demonstrates that it took the subjects an extra week to catch up to where the other two groups were able to reach in their first week of treatment. This may be due to the focus on *two* pre-activities (transition words and pre-speaking) as opposed to just one, as was the case with the two other groups.

When Pre-Test and Treatment 2 word counts are compared, the significant interaction between group and time reveals that Groups 2 and 3 produced substantially fewer words than Group 1 at the study outset, but went on to make substantially greater gains of approximately 83 and 85 words respectively compared to the more modest 19 word gain by Group 1. This demonstrates the benefits of pre-speaking activities when scaffolding is provided. However, when that scaffolding is removed and no pre-activities are conducted, the significant interaction disappears despite still larger increases by Groups 2 and 3. This shows that it is the earlier practice with scaffolding activities rather than a specific type of pre-activity that provides statistically significant advantage. Thus, as with the other factors of complexity there is benefit to having some form of pre-activity prior to speaking when it comes to total word count; a benefit which appears to remain when that scaffolding is removed.

Impact on Words per Clause

Turning now to words per clause as summarized in Table 33, there was no significant difference between the different groups nor was there an interaction between group and time; however, there was a significant difference between the different times, regardless of group.

Table 33

Significance for Words per Clause

Answer to RQ1 based on words per clause	Basis of Comparison	Differences by Group	Differences by Time	Group x Time Interactions
Based on Significance: Qualified Yes, but only with scaffolding How: *By end of treatments:* No treatment provided an advantage over others when scaffolding present *Without scaffolding (by Post-Test):* no treatments made a significant impact	Comparing all times	✖ p=0.630	✔ p<0.001 There was a significant difference between the Pre-Test and all other times; this was generally an increase except between the Pre-Test and the Post-Test.	✖ p=0.182
	Pre-Test vs. Treatment 2	✖ p=0.321	✔ p=0.045 Confirms above	✖ p=0.146
	Pre-Test vs. Post-Test	✖ p=0.806	✖ p=0.387 Confirms above	✖ p=0.155

✖= no signficance
✔= signficant

In particular, the words per clause produced in the Pre-Test only differed from the two Treatment responses, but not when compared against the Post-Test levels. In other words, when there was scaffolding provided during the treatments, the subjects did better than during the Pre-Test. However, when scaffolding was removed as during the Post-Test, subjects did not perform significantly better than during the Pre-Test. It is worth noting that Groups 2 and 3 *decreased* in words per clause in the Post-Test when compared to the Pre-Test; the findings seem inconsistent compared to the other sub-components of complexity. No significance was found in the decrease in words per clause from the Pre-Test to the Post-Test and it is also not very meaningful because the significant decrease represents a fraction of a word (Group 2, 0.175 words; Group 3, 0.030

words). In other words, the number of words per clause do not affect complexity as much as the other sub-components.

Summary of Complexity: Response to RQ1

Based on these findings, the different pre-activities had a partial effect on complexity, which I summarize in the table below (Table 34).

Table 34

Summary of Complexity

Sub-Component	Do activities impact complexity?	Notes
Total Transition Words	Yes With scaffolding: Pre-speaking Without scaffolding: no difference in treatment	By the end of Treatment 2, there was a significant interaction between time and group where the Pre-Speaking Groups 2 and 3 made greater gains in number of transition words use than Group 1 (transition word group).[9]
Taught Transition Words to Untaught Transitions	Yes No treatment type significantly more advantageous	Combo group (3) used more taught transition words overall; transition word group (1) had largest gain from Pre- to Post-Test; pre-speaking group (2) made fewer gains in taught transitions. • Transition word groups (1 and 3) used more transition words (Group 3) or made greater gains (Group 1)
Total Clauses	Yes Pre-speaking activities led to larger increases in number of clauses	Pre-speaking groups (2 and 3) showed greatest gains in number of clauses from Pre-to Post-test (by 8.285 and 8.714 respectively); Group 1 made fewer gains since already produced more clauses than the other groups from the outset of study (gain of less than one clause).
Total Words	Yes With scaffolding: Pre-speaking Without scaffolding: no difference in treatment	Group 1 (transitions) had the least room for gains; Groups 2 and 3 (both used pre-speaking) made largest gains from Pre-Test to Treatment 2 (85.57 and 80.93 respectively) and Pre-to Post-Test (58.429 and 59.429 respectively).
Words per Clause	Qualified yes	Only with scaffolding were there gains compared to Pre-Test.

Based on this summary, we can conclude that overall pre-activities do impact complexity. More often than not, pre-speaking activities resulted in greater increases in complexity than transition word activities alone. This is the case especially when scaffolding was provided (following

[9] Although by the Post-Test, Groups 1 and 3 used more transition words than Group 2, the focus of the study was on the improvements and gains in transition words.

Treatment 2), with the groups receiving pre-speaking (Groups 2 and 3) showing greater levels of complexity in terms of total transition words used, total clauses, and total words produced. Indeed, this increase remained when there was no scaffolding (following the Post-Test) for these groups in terms of total clauses. When scaffolding was removed, the subjects responded to the prompts without the benefit of pre-activities and no treatment in particular appeared to provide more of a benefit than another when scores were compared against Pre-Test values . Instead, all groups tended to show improvements over the Pre-Test. Consequently, it could be argued that the sheer oral practice, regardless of treatment type, provided some benefit for proficiency in comparison to initial Pre-Test scores.

Lastly, there was no significant differences between the groups for words per clause, suggesting that this sub-component of complexity is not as influenced by treatment as those previously mentioned above.

Thus, it is the pre-speaking activities either alone or in connection with the transition word activities that impact the most factors for improvement in complexity. Although in many cases, the transition group did tend to use more transition words, etc., they did not undergo the same level of improvement as the other groups, perhaps in part because they were already using those subcomponents, e.g., word count, transition words, etc. close to some unspoken threshold providing less room for improvement. That said, what is important to note here is that regardless of teaching method, there was a trend showing a significant increase of transition word and clause output over the Pre-test (as illustrated by the significance of the variable time). Nevertheless, when scaffolding was removed during the Post-Test, there were decreases from Treatment 2 to the Post-Test across these subcomponents of complexity, thereby highlighting the importance of scaffolding. Despite these declines, none of the Post-Test results fell back to Pre-

Test levels, suggesting that, regardless of the teaching method, having some form of scaffolding prior to speech production can lead to gains in proficiency over time. In the case of the combination of pre-speaking and transitions, it appears that it may take one more treatment session for that gain to be realized.

This same trend continues for fluency, which I outline in response to the second research question in the following section.

Do transition word, pre-speaking activities, or a combination thereof have an effect on fluency in oral responses? If so, how? Is one type of activity, i.e. treatment, more beneficial than the other?

To answer RQ2, I first outline how the individual sub-components of the measures used for fluency contribute to our understanding of the impact of transition and pre-speaking activities on fluency as measured in this thesis. I begin by discussing the total minutes, followed by a discussion on words per minute.

Impact on Total Minutes

Table 35 below reiterates the statistical findings presented in Chapter 4 for total minutes. Following the trend with the sub-components of complexity, there is no significant difference between the different groups, yet there is a significant difference between the times and with the interaction between group and time.

Table 35

Significance for Total Minutes

Answer to RQ2 based on total minutes	Basis of Comparison	Differences by Group	Differences by Time	Group x Time Interactions
Based on Significance: Yes How: *By end of treatments:* No treatment is significantly more beneficial than another *Without scaffolding (by Post-Test):* Pre-speaking had the greatest impact on duration, particularly for Group 3 by end of the study. *Trends*: All groups spoke significantly longer in the treatments and the Post-Test when compared to the Pre-Test. Groups 2 and 3 spoke longer than Group 1 consistently across the treatments and Post-Test.	Comparing all times	✖ p=0.197	✔ p<0.001 The responses to the Pre-test were significantly shorter than for the remaining responses across all groups. There was also a significant decrease in the amount of time spent responding to the prompts from Treatment 1 to Treatment 2 and to the Post-test.	✔ p=0.004 Groups 2 and 3 spoke longer after every treatment and during the Post-Test when compared to Group 1. Group 3, however, maintained time over Group 2, which became shorter from Treatment 1 to Treatment 2.
	Pre-Test vs. Treatment 2	✖ p=0.455	✔ p=0.005 There was a significant increase in minutes over the Pre-Test.	** p=0.089
	Pre-Test vs. Post-Test	✖ p=0.374	✔ p<0.001 Post-Test responses were significantly longer than Pre-Test responses.	✔ p=0.039 Group 3 has largest increase (0.99 min) vs. 0.54 for Group 2 and 0.096 min for Group 1.

✖= no signficance
✔= significant
**= approaching significance

While there was no explicit significance in duration of responses between the different groups, there is a significant increase in duration regardless of group from the Pre-Test to the end

of Treatment 2 and the Post-Test. When all times were taken into consideration, a significant interaction was found between group and time. Further examination revealed that Group 3 made the most increases between Pre- and Post-Test followed by Group 2 and lastly by Group 1.

The interaction between time and group illustrates that having pre-speaking activities, with a focus on content and language tools needed to complete the task, increased the amount of time the subjects were able to use to respond to the prompt thereby benefitting both Groups 2 and 3. The transition word activities alone lacked a focus on content even with the sample response subjects were shown just prior to responding to the prompts. It is also interesting to note that Group 3 is the only group to maintain lengthier responses whereas Group 2 produced shorter responses from Treatment 1 to Treatment 2, then from Treatment 2 to the Post-Test, while not dropping to the level of Group 1. This may be because, while pre-speaking alone exposes the subjects to the content and needed structures for the prompt, a combination of pre-speaking *and* transition word activities provides yet another tool (transition words) to help subjects produce more speech. Finally, following the trend, all groups (regardless of teaching method) produced significantly longer responses during all treatment sessions and the Post-Test when compared to the Pre-Test.

Impact on Words per Minute

The main and final sub-component of fluency examined in this study is words per minute. As outlined in the previous chapter, the difference between groups was approaching significance when all times were considered and when the Pre-Test was compared against the Post-Test. On the other hand, the difference between the responses, i.e., times, regardless of group, was consistently found to be significant. The interaction between group and time, however, was not found to be significant (although it was approaching significance for the Pre-

vs. Post-Test results). A brief overview of the statistical findings are outlined in the table below (Table 36).

Table 36

Significance for Words per Minute

Answer to RQ2 based on words per minute	Basis of Comparison	Differences by Group	Differences by Time	Group x Time Interactions
Based on Significance: Yes How: *By end of treatments and study*: Words per minute increased regardless of groups (i.e., treatment) with or without scaffolding.	Comparing all times	** p=0.088 Group 1 produced more words per minute from the prior to any treatment sessions (Pre-Test mean=58.31). Group 2 increased in words per minute in an identical pattern to Group 1, while Group 3 did not increase in words per minute as much as the other two groups.	✔ p<0.001 Words per minute increased in all times following the Pre-Test. It further increased from Treatment 1 to Treatment 2 before significantly decreasing from Treatment 2 to the Post-Test.	✖ p=0.239
	Pre-Test vs. Treatment 2	✖ p=0.140	✔ p<0.001 Confirms above	✖ p=0.423
	Pre-Test vs. Post-Test	** p=0.087	✔ p<0.001 Confirms above	** p=0.081

✖= no signficance
✔= signficant
**= approaching significance

It is interesting to note the increase in words per minute based on the different teaching methods. The transition word group (Group 1, 5.21 increase in words per minute from Pre-Test to Treatment 1) and the pre-speaking group (Group 2, 7.17 increase in words per minute from

Pre-Test to Treatment 1) had similar increases in words per minute compared to the combination group (Group 3), which showed a miniscule increase in words per minute from the Pre-Test to Treatment 1 (0.327 increase in words per minute from the Pre-Test to Treatment 1). At its greatest increase, from Treatment 1 to Treatment 2, the combination group actually caught up with the increases observed in the other two groups. That is, by Treatment 2, Group 1 saw a 10.20 increase in words per minute from the Pre-Test and Group 2 saw a 14.61 increase. Group 3 was comparable with a 9.98 increase in words per minute from the Pre-Test to Treatment 2, demonstrating that by combining the two pre-activities, it takes subjects longer to catch up in terms of words per minute. Also, based on these findings, the pre-speaking group (Group 2) shows the evidence for the greatest gains in words per minute over the other two groups. Finally, as is the trend with the other sub-components of complexity and fluency, there is a significant decrease in words per minute from Treatment 2 to the Post-Test, illustrating the necessity of scaffolding, regardless of teaching method, to increase words per minute.

Summary of Fluency: Response to RQ2

Based on these findings, the different pre-activities had only a general effect on fluency, which, in summary, I outline in the table below (Table 37).

Table 37

Summary of Fluency

Sub-component	Do activities impact fluency?	Notes
Total Minutes	Yes *With scaffolding:* Pre-speaking tends to be more effective, but not significant *Without scaffolding*: Pre-speaking	Pre-speaking groups (2 and 3) spoke longer than the transition only group (1); combination of transition words and pre-speaking (Group 3) maintained that longer duration when Group 2 underwent a decrease in duration from Treatment 1 to 2.
Words per Minute	Yes *With and without scaffolding:* No group or treatment significantly better than another; no difference in treatment	No significant differences between groups; all increased overtime with Group 3 needing more time to catch up to Groups 1 and 2.

In response to the research question, no one treatment type emerged as clearly more effective than the other whether alone or in combination. In terms of response duration, the pre-speaking groups (2 and 3) tended to provide longer responses to the prompts, with the combination group (3), maintaining that longer duration over even Group 2 from Treatment 1 to 2. Indeed, Group 3 made the largest increase in response duration (0.992 minutes) in comparison to Group 2 (0.54 minutes) and Group 1 (0.096). This suggests the benefit of some type of pre-speaking approach either alone or with the transition words. Since Group 3 also had made the largest gains in use of transition words, it may follow that resulted in their ability to speak longer when provided with the practice of focusing on content alongside grammatical forms.

Meanwhile for words per minute, no significant differences were found between the groups nor was there a group by time interaction. As was found elsewhere, Group 3 needed until Treatment 2 to catch up to the words per minute rate similar to the other two groups. Most

interesting is the finding that Group 2 made the largest gains in words/minute from Pre- to Post-Test with an average increase of 10.14 words/minute in comparison to 5.689 words/minute for Group 1 and just 1.771 words/minute for Group 3. That Groups 2 and 3 did not pattern together in increases reflects the decrease from Treatment 2 to the Post-Test to near Pre-Test levels.

Indeed, what is critical is that all pre-activities, i.e., pre-speaking and transition word activities, resulted in increases for fluency across the times over the Pre-Test and decreases from Treatment 2 to the Post-Test, illustrating how scaffolding in general rather than a specific type of pre-activity is essential to maintain or increase fluency.

RQ 3: How does an increase in complexity (and to a lesser extent, fluency) reflect an increase in text type?

As has been observed thus far from the responses to the first two research questions, regardless of the type of pre-activity, whether one is teaching transition words, anticipating content and forms via pre-speaking activities, or combining the two, one can expect some gains in complexity and fluency (as defined in this thesis), when compared to not receiving any scaffolding at all. The consequence of this instruction on complexity and fluency is an increase in their text type. Indeed, the results for this study demonstrate how performance over time leads to increases in complexity and fluency, which I relate to text type, a key component of proficiency.

The discussion to this point, however, has been based on statistics and discussions in the abstract. To answer the final research question, I present a case study which allows the reader to see first-hand what these changes look like in practice, in particular, that the consequence of increased word count, use of transitions, etc. do indeed result in a “better” response to the oral

prompts. The case study, therefore, exemplifies moving up the proficiency scale by moving learners from strings of sentences to emergent paragraph level speech.

Case Study: Response to RQ3

The following case study presents the responses from a subject in the combination group (Group 3) to illustrate how the sub-components of complexity and fluency combine to demonstrate a shift from more sentence-level text type to more paragraph-level responses. This subject was chosen because his responses, including the counts of transition words, total words, response duration, etc. reflected the trends discussed above for complexity and fluency. Again, the pre- and post-test responses are included to demonstrate improvement from the beginning to the end of the study where responses were provided without scaffolding. However, I also include the response from Treatment 2 to demonstrate the benefits of the scaffolding. This treatment was selected since it often took until the second treatment for subjects in Group 3 to maximally reflect the influence of the treatments.

The transcriptions below reflect pruned speech (Geng & Ferguson, 2013; Ortega, 1999), meaning that the pauses, fillers, and false starts have been removed from the speech samples for ease of illustration. The complete French transcription for each response appears in the left column; the right column provides translations into English of select phrases that suggest movement towards advanced-level speech, i.e., an increase in text type. The corresponding segments in the original French text have been italicized in English. At the top of each table is found information regarding the subject's total word count, use of transition words, etc. to highlight the changes in the sub-components of complexity and fluency. As a reminder, the Pre-

Test served as a control in the study, as no treatment was provided prior to subjects' giving responses.

Table 38

Pre-Test Transcription for Subject 3C

Pre-Test	
Complexity • Total Transitions: 11 • Unique Transitions: 7 • Total Clauses: 22 • Total Words: 160 • Words per Clause: 7.3	Fluency • Total Minutes: 2.75 • Words per Minute: 58.18
French Transcription	English Translation
Pour moi, je pense que les qualités d'un bon dirigeant sont être sympathique **et, aussi,** être honnête. Mes parents, **pour moi,** sont bons dirigeants **parce que** ils sont sympathiques à tout le monde **et** ils veut bien aider les autres. Je me souviens **quand** j'étais petit, ma mère a toujours aidé les autres avec leurs fils et filles et mon père, il toujours allait avec nous mes frères et moi, **et** nous avons servi les autres, **alors je pense que** les qualités les plus importants sont être sympathique.	*For me, I think that the qualities of a good leader are be kind and, also, be honest. My parents, for me, are good leaders because they are friendly to everyone and they wants to help others. I remember when I was young, my mother always helped others with their sons and daughters, and my father, he always would go with us, my brothers and I, and we served others, so I think that the most important quality is to be kind.*

The subject's pre-test response reflects an intermediate-level response consisting of strings of sentences with limited use of transition words and elaborated ideas. Even more fundamentally, when compared with the subject's response to the Treatment 2 prompt provided in Table 39 below, the oral response time, words per minute, total transitions, word count, unique transitions, and clause count were all substantially lower. After two weeks of reinforced treatment, including transition word and pre-speaking activities, however, the results of Treatment 2 for subject 3C reflect some of the trends discovered in the results of this study.

Breakdown. It is also important to note that the speech samples in the following two tables (39 and 40), in their original forms, i.e., including pauses, fillers, and false starts, displayed elements of speech breakdown. Part of this issue stemmed from subjects overshooting

rich descriptions (an advanced function) to supporting their opinions (a superior function) in their responses. More so, however, there was evidence that breakdown was caused as the subjects thought more carefully about their language choice, namely in terms of vocabulary and correct conjugations of verbs while also monitoring and correcting for pronunciation. In other words, while it is true that subjects sometimes faltered in supporting their ideas (superior level function) and thus displayed breakdown by overshooting the next proficiency level, it was often the case that the subjects were concentrating on a more micro-level, focusing on word choice and verb conjugations to ensure that they communicated in an accurate fashion what they wanted to say. This may have been a direct result of the treatments, regardless of teaching method.

Table 39

Treatment 2 Transcription for Subject 3C

Treatment 2	
Complexity • Total Transitions: 37 • Unique Transitions: 11 • Total Clauses: 60 • Total Words: 355 • Words per Clause: 5.9	Fluency • Total Minutes: 4.72 • Words per Minute: 75.27
French Transcription	English Translation
Je pense que un des problèmes le plus grand dans le monde est la pauvreté. **1) *Selon moi,*** *beaucoup de temps,* ***quand*** *nous pensons de la pauvreté, nous pensons l'Afrique ou tous les pays de la troisième monde,* ***mais*** *ici, aux Etats-Unis, la pauvreté est un problème aussi.* **Je pense que** c'est difficile à savoir ce que la meilleure chose à faire pour combattre la pauvreté, **mais je pense que** nous avons un responsabilité à battre la pauvreté. **Je pense que** un des problèmes avec la pauvreté est **parce que** il y a beaucoup de gens qui veut donner l'aide à les pauvres, **mais** ils ne sait pas comment ils peuvent aider les pauvres. **2) *Je pense que*** *il y a aussi un problème* ***parce que*** *il y a beaucoup des églises qui veulent donner l'aide aux pauvres,* ***mais aussi*** *le gouvernement a besoin de aider les pauvres* ***et****, beaucoup de temps, ils ne travaillent pas ensemble*, **mais je pense que** chaque citoyen des Etats-Unis, et du monde aussi, a responsabilité à donner argent et donner le temps et donner la nourriture à les pauvres. Un jour, j'ai vu un homme qui est sans abri **et** je lui parlais et **je pense que c'est important** pour tout le monde à parle à ces personnes **parce qu'**ils sont humains comme nous **et** ils ont choses qu'ils veulent **et** avoir besoin de et **je pense que quelque fois** nous voyons les pauvres **mais nous ne pense pas** qu'ils sont comme nous. **Nous pensons que** c'est leur faute, **3) *mais*** *beaucoup des pauvres ne peut pas trouver travail,* ***même si*** *ils veulent le trouver,* ***alors je pense que*** *c'est un question très difficile,* ***mais*** *c'est un question nous avons besoin de parler.* **Finalement, je pense que** les choses les plus importants que chaque de nous peut donner les choses que nous pouvons. C'est dur pour chaque personne **mais si** tout le monde peut donne quelque chose ça c'est bon pour combattre la pauvreté et, **je pense que** les choses que nous donnons sont petits, ça va **même si parce que** c'est bien et nous pouvons faire quelque chose.	1. *In my opinion, often, when we think about poverty, we think about Africa or all of the third world countries, but here, in the United States, poverty is a problem as well…* 2. *I also think there is a problem because there are many churches that wants to give aid to poor people, but also the government needs to help poor people and, most of the time, they don't work together…* 3. *…but many poor people can't find work even if they want to find it, so I think that it's a difficult question, but it's a question we need to talk about.*

As the reader will note, from the pre-test, the subject increases in every category except words per clause, where there was a minor decrease in words per clause. In terms of total transitions, he uses 26 more transition words including 4 new unique transition words; the number of clauses increases by 28 from 22 clauses to 60. Additionally, the word count more than

doubles from 160 words to 355 with a slight decrease in clause length from 7.3 to 5.9 (a little over 1 word per clause). Thus, and not surprisingly, the duration of response increases from 2.75 minutes to 4.72 minutes with a substantial increase in words per minute from 58.18 to 75.27. In short, the subject's response after Treatment 2 demonstrates a far more substantial response with more detail. Thus, in terms of text type, the subject demonstrated a distinct move from strings of sentences to more elaborate speech with expressions such as *je pense que* 'I think that', *alors* 'so, thus', and *mais aussi* 'but also'. Such expressions take a singular idea and build upon it with supplemental details which move the response towards paragraph level speech, i.e., more advanced-level text type. These increases in complexity and fluency indicators reflect the trend seen in all groups, regardless of teaching method, in that there were overall increases in complexity and fluency over the Pre-Test.

So, what happened when scaffolding was removed and the subject responded to the Post-test prompt? While his response, found in Table 40 below, illustrates a decline from the response given after Treatment 2 in most aspects, it is critical to note that the quality and quantity of the response in terms of complexity and fluency, as used here in this thesis, does not return to Pre-test levels. This finding is typical of most subjects regardless of treatment group.

Table 40

Post-Test Transcription for Subject 3C

<table>
<tr><td colspan="2">Post-Test</td></tr>
<tr><td>Complexity
Total Transitions: 31
Unique Transitions: 11
Total Clauses: 37
Total Words: 249
Words per Clause: 6.7</td><td>Fluency
Total Minutes: 4.18
Words per Minute: 59.52</td></tr>
<tr><td>French Transcription</td><td>English Translation</td></tr>
<tr><td>Je pense que il y a beaucoup de qualités qui sont importants. Premièrement, je pense que peut-être les choses les plus importantes est pour cette personne à être un personne qui aime les États-Unis et aussi un personne qui toujours essaie faire choses bien. 1) Je pense que il est très difficile pour un personne être président, alors je pense que il ou elle devrait très committed à la paix et il y a beaucoup des issues qui un président a besoin de penser de et c’est difficile savoir quelles issues sont les plus importants mais je pense que il est nécessaire penser de les peuples qui sont pauvres dans notre pays et aussi dans les autres pays du monde. 2) Avec l’immigration et avec l’aide financière, je pense aussi que il est important à aider les business parce que il y a beaucoup de gens ici aux Etats-Unis qui ne peut pas travailler. Je pense que je connais le maire de Lindon et je pense que il a beaucoup de qualités d’un bon président ou bon maire aussi, 3) parce que il aime les gens et, aussi, il peut penser de choses de la même situation, les opposites opinions, et malgré ça, il toujours essaie à faire les choses qui sont le meilleur pour sa ville, alors j’espère que notre prochain président va être quelqu’un qui aime les gens de tout le monde et aussi qui veut aider les immigrés et veut aider les pauvres et aider les business aussi.</td><td>I think that it’s very difficult for a person to be president, so I think that he or she should be committed to peace and there are many issues that a president needs to think of…
With immigration and with financial assistance, I think it’s important to help businesses because there are a lot of people here in the United States who is not able to work.
because he likes people and, also, he can think about… opposite opinions and, despite that, he always tries to do the best things for the city, so, I hope that our next president is going to be someone who loves people from all over the world and who also wants to help immigrants…</td></tr>
</table>

Table 41

Changes in Complexity and Fluency from Pre- to Post-Test for Subject 3C

	Pre-Test	Treatment 2	Post-Test	Pre-to Post-Test Change
Total Transitions	11	37	31	+20
Unique Transitions	7	11	11	+4
Total Clauses	22	60	37	+15
Total Words	160	355	249	+89
Words/Clause	7.3	5.9	6.7	-0.6*
Total Minutes	2.75	4.72	4.18	+1.43
Words/Minute	58.18	75.27	59.52	+1.34

*marks an increase from Treatment 2

Thus, although the lack of scaffolding resulted in a reduction in most aspects of complexity from Treatment 2 to the Post-Test (with the exception being words/clause which actually increased by 0.8 words/clause and unique transitions which remained consistent), these values did not return back to Pre-test levels.[10] The comparison of results between the Pre-Test and Treatment 2 illustrates how two weeks of the reinforced method led to substantial gains in many of the sub-components of complexity and fluency, namely in terms of total transitions (20 additional transition words), unique transitions (4 new unique transitions), total clauses (15 clauses), total words (89 words), total minutes (1.43 minutes), and words per minute (1.34 additional words/minute). The reason for including the Post-Test results are twofold: First, by comparing the Post-Test findings to Treatment 2, one can perceive the impact of scaffolding, as there is a decrease in several sub-components of complexity and fluency, although not all,

[10] This is true of the word/clause measure which never quite returned back to the Pre-test level. That said, the difference is 0.6 words/clause which difference is arguably small, being less than a word per clause.

suggesting that subjects retained components of the teaching methods. Second, by comparing the Pre- and Post-Test results, evidence of increased text type, as it relates to proficiency, can be seen. Neither the Pre-Test nor the Post-Test involved a teacher or scaffolding, thus, the repeated performances, i.e., practice at responding to the various prompts including at times with scaffolding via the treatments, led to increases in proficiency. Consequently, interventions such as those provided in this study do have a benefit for at least a week in helping students make progress on their proficiency without the aid of a teacher. Setting aside the raw numbers of the increases, the reader can readily see a difference in the quality and quantity of the responses from the Pre-Test to both the Treatment 2 and Post-Test responses illustrating in more practical terms what this impact looks like in actual oral responses, i.e., quality of language.

Post-Study Survey Results and Discussion

Before closing, it is worth highlighting how students responded to the various treatments. As mentioned in Chapter 3 of this thesis, the subjects participated in a post-study survey where they gave their opinions on how helpful and enjoyable they found the teaching methods. This survey was given with the intent of making connections between the subjects' perception of the activities and their results.

Group 3 (combination group) thought that the treatment session was both enjoyable and helpful, as opposed to Group 1(transition words), which had higher enjoyability and lower helpfulness, and Group 2 which had lower enjoyability and higher helpfulness. The table below (Table 42) outlines the results of the post-survey, which asked for the subjects' opinions on helpfulness and enjoyability using a 10 point Likert Scale.

Table 42

Post-Survey Results

Group	Helpfulness	Enjoyability	Average
Group 1	6.4	7.0	6.70
Group 2	7.3	6.2	6.75
Group 3	7.0	7.3	7.15

Based on these results one sees that in terms of helpfulness, both groups participating in the pre-speaking activities responded slightly more favorably than those solely receiving transition word/expression instructions. On the other hand, the groups which experienced the transition word activities, namely 1 and 3, expressed higher levels of enjoyment than those who had only done the pre-speaking (Group 2). When these scores were averaged, the result was a slightly higher satisfaction rate for Group 3 which combined the benefits and enjoyment of both treatment types.

Limitations

Throughout the study and during the data analysis, some limitations arose, some of which are outlined below. I begin by discussing limitations based on the tasks chosen for this study, followed by procedural problems faced during the treatment sessions. Finally, I mention limitations in choosing transition words and expressions for this study, followed by some limitations with the size of the groups.

Tasks

To reiterate, although each task was intended to encourage advanced-level speech, one of the tasks, namely the Treatment 1 oral prompt, resulted in subjects attempting to provide the type of response characteristic of superior-level speech. This is because when asking for an opinion (advanced function), many subjects attempted to *support* their opinions (superior function) as well. Consider the first treatment task in which subjects were asked to describe the civil and political aspects of a new civilization on a deserted island of their choice. The intent of this prompt was the advanced function "description". As with the other prompts, this task was based on the current course work in the subjects' 3rd semester French classes. Since subjects were asked to provide a description of their new civilization, it was not anticipated that they would focus so much of their task response striving to support their opinions, thus leading to speech breakdown.

In addition to subjects overshooting descriptive speech, there was also some breakdown pertaining to vocabulary choice and verb conjugations. It was evident that many of the subjects were thinking about their language as they used it, regardless of the level of discourse, thus showing how pre-activities may influence students to more carefully consider their language use as opposed to perpetuating familiar mistakes. This factor, therefore, also contributed to some breakdown in their speech.

Treatment Sessions

During the second week of treatment, one of the subgroups receiving the combination treatment, i.e., Group 3, the computer shut down preventing the prompt and example from being shown using the PowerPoint slides as was done with the other groups. Instead, a hard copy was used as reference, and the oral prompt was written on the board. The pre-speaking activity was

conducted in the usual fashion, and the example was read aloud to the subjects. Following reading the example, the hard copy was passed around for each of the subjects to look at for themselves. Thus, like the other groups, they were able to both hear and see the example before responding to the task in the computer lab.

Also during the second week of treatment, i.e., Treatment 2, the task failed to be queued in the Humanities Lab in time for one of the Group 2 subgroups to respond to the prompt in the usual way. Because of this, the prompt was prepared just prior to the treatment session in a testing lab adjacent to the Humanities lab using NetRecorder. Subjects were provided with the same instructions; however, instructions were read aloud as opposed to being provided on-screen prior to recording. Subjects' recorded their responses to the prompt in the usual way, using a microphone headset, and were allotted up to 5 minutes to record like in other groups. Following the treatment, all of the data was collected and to be transcribed at a later time with the other speech samples.

Finally, during the treatment sessions involving transition word pre-activities, the "create" segment was, at times, illogical. This resulted from the organization of the activity, meaning that subjects were required to use the transition word they drew from the envelope to add details to a previously existing sentence. Some of the transition words did not lead to a logical sequence in the passage being created by the group, such as *d'abord* (first), however, the subjects were required to use the word despite the illogical word choice. If this activity were to be done again in the future, subjects should be allowed to put aside illogical words and draw a new one to continue creating using a logical sequence.

Transition Word Selection

Another limitation stems from choice of transition words and expressions to be used in the study. When selecting transition words to be taught during the treatment sessions for the transition word group (Group 1) and the combination group (Group 3), effort was made to avoid expressions that triggered the subjunctive. While such expressions would ideally add elaboration and details to create rich descriptions, the subjects had not yet reviewed the subjunctive at the moment of the study in their 3rd semester French courses. Consequently, the choices of transition words that enabled the use of grammar familiar to the students increased the likelihood that there would be words and expressions that were relatively familiar to the subjects. This may account for the reason some groups began using a high number of transition words before ever receiving treatment.

Group Size

The target subjects for this study were 3rd semester French students because, ideally, they speak at an intermediate level and were striving for more advanced speech by the end of the semester. Consequently, the number of subjects both able and willing to participate in the study was small, resulting in small groups overall. Fortunately, however, attrition was not a major factor in the study, having lost very few subjects and maintaining relatively equal groups throughout. An accompanying factor to the potential subject pool is the impact of instructor. It may have been that some instructors already used pre-speaking or transition word activities in their classrooms, thus providing subjects with an advantage over other students who did not have the experience. To minimize the teacher effect as much as possible, one factor that helped determine group assignment included who their instructor was and distributing subjects as evenly as possible across the groups.

Suggestions for Future Research

Based on this study, a number of other suggestions for future research arise building on the results herein.

First, this study collected data for unique transition words, that is, a count of transition words used in each oral response being counted only one time, even if the subject used the transition word more than once in a response. Statistical analysis on unique transition words have implications for lexical variety, a sub-component of complexity that can gauge how language changes based on scaffolding. For the sake of time and length, these statistics were omitted from this thesis, but may provide further insights into the use and role of transition words en route to developing paragraph-level responses.

Another area rife for research into complexity includes the categorization of transition words and the types of clauses they build, e.g., temporal, elaboration, or causative type clauses (Rivard, Minkala-Ntadi, Roch-Gagné & Gueye, 2017). These transition word categories may have implications for text type, as they indicate whether the clauses they trigger indicate strings of sentences (intermediate) or elaborate on a topic (advanced). For the sake of time and scope, these categories were not analyzed in this thesis but could prove valuable in future research when investigating the relationship between complexity and increasing text type. Indeed, is it possible to help draw explicit attention to the various means by which elaboration can occur to help students provide more detail in their descriptions and narrations.

Next, it was interesting to note in this study, when investigating the taught to untaught transition word ratio, how the pre-speaking group used more taught transition words than untaught words, despite having never received any treatment on specific transition words to use during their responses. More research is needed to determine if the sample response to the

prompt shown immediately prior to the response, which contains the taught transition words, is the reason behind the pre-speaking group using more taught transitions, or if that tendency came from some other source.

Finally, this study has findings relevant to speech at the paragraph level and methods that demonstrate movement from strings of sentences to paragraph-level speech. While coherence and cohesion *within* paragraphs represent one aspect of advanced-level text type, more research is needed in regards to narration, or inter-paragraph cohesion. In other words, research could in turn be carried out to test how to help students move from connected to extended discourse.

Pedagogical Implications

The findings in this thesis have direct implications for teaching, especially pertaining to communicative activities in the classroom. First of all, based on the significant increases in all sub-components of complexity and fluency over the Pre-Test, regardless of teaching method, it is important that some kind of scaffolding be prepared prior to speaking activities to facilitate proficiency building. By doing so, the hope that performance over time at a higher level leads to proficiency comes to fruition.

For pre-activities to serve their full purpose, whether in the form of transition word activities or pre-speaking, speaking tasks must be carefully considered to ensure appropriateness with the level of the students being taught. As was seen in this thesis, some subjects overshot the intention of the task and, effectively, jumped a proficiency level, which lead to speech breakdown. By carefully considering speaking tasks and ensuring that they are appropriate for helping students move up the proficiency scale, pre-activities become very effective in accelerating the process. Furthermore, in preparing activities like those used in this study, it is essential that teachers consider their course themes. By focusing on tasks related to the content

and language tools relevant to their course curriculum, they facilitate the process of creating pre-speaking and transition word activities.

Preparing transition word activities that require a variety of transitions and elaboration can be a daunting task for teachers. Creating a cloze paragraph, for example, requires thoughtful consideration to ensure that students will be able to add their own details and transition words. First, teachers can write their own detailed paragraph, complete with transition words and rich descriptions that serve as a model of what they would expect students to produce. Then, by deleting their own details and transition words and leaving a blank space for students to add their own elaboration, they have effectively created a cloze paragraph. An example of how to do this can be found in Appendix G. Special care must be taken when preparing these types of activities, however, to avoid perpetuating strings of sentences. This can be done by making sure the topic of the paragraph remains consistent throughout and that details add rich description to the main idea. Disconnected or separate ideas from the main topic of a paragraph, such as the cloze paragraph used for Groups 1 and 3 of this thesis for Treatment 1, may perpetuate intermediate level discourse. Additionally, the type of transition words the cloze paragraph requires should be considered as well, as some temporal transition words perpetuate strings of sentences while opposing or causative words may require more elaboration, thus leading to paragraph-level discourse. Not all transition words are created equal.

In conclusion, pre-speaking and transition word activities, when carefully prepared, can enhance communicative activities in the classroom. These types of pre-activities give credence to the assumption that performance at a higher level over time leads to higher levels of proficiency.

Conclusion

This thesis examined how pre-activities, namely transition word and pre-speaking activities, affected fluency and complexity as they relate in particular to increasing text type. For fluency, it was found that pre-speaking had advantages over transition word activities alone in terms of words per minute. On the other hand, a combination of the two methods facilitated the production of longer oral responses over all. In terms of complexity, evidence was also found that pre-speaking helps speakers produce more clauses than transition word activities alone, giving some additional credence to Gaillard's (2013) thesis demonstrating the benefits of pre-speaking activities to increasing the quantity and quality of oral responses.

Finally, for both fluency and complexity, there was a consistent trend that suggested, regardless of pre-activity, that providing scaffolding before oral exercises can lead to increases in these aspects of text type. Admittedly there were consistent decreases in the sub-components of fluency and complexity when there was an absence of scaffolding, namely from Treatment 2 to the Post-Test, however, since Post-Test results across the sub-components of fluency and complexity never fell back to Pre-Test levels, there is evidence that performance over time, with scaffolding, can lead to increased proficiency, including text type. The findings in this thesis thus introduce how different pre-activities have implications for text type. Furthermore, this study has laid the groundwork for future research investigating relationships between L2 teaching methods and increasing proficiency in terms of text type.

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Appendix A

Biosurvey

Biosurvey: Pre-Study (administered using Qualtrics)

Name: _____

Year in school: _____

A. YOUR BACKGROUND

1) Age:_____ (Year and month) Gender: Male Female

2) Where were you born? _____

3) Where did you grow up? (Especially between the ages of 6 and 14): (do we need this?)

4) What is your native language?_____

5) a. How long have you been studying or learning French? _____ (in years)

b.Highest level of class taken (please also include the typical year at school/university which this class would be taken, e.g., 2nd year university):

6) Do you speak any other languages? If so, which ones?

7) How would you rate your ability/proficiency in French?

Beginner			Intermediate					Fluent/Native-like	
1	2	3	4	5	6	7	8	9	10

8) Have you lived in a French milieu? If so, give the location and dates (year and months). Please indicate the purpose of your stay, e.g., school, vacation (use the back of this sheet for more room):

9) How long has it been since you left the French milieu?:

10) How often do you typically use your French on a weekly basis doing the following activities (approximate number of hours):

a. *Reading:*

b. *Talking to friends:*

c. *Writing (emails, school work):*

d. *Listening to the radio or watching the news:*

11) How does your use of French compare to your use of any other second language you have learned?

12) On a scale of 1-10, how closely did you relate (connect) to the French culture to which you were exposed?

Didn't relate			Somewhat related					Completely related	
1	2	3	4	5	6	7	8	9	10

Appendix B

Transition Words Treatments 1 and 2

Treatment 1 Transition Words

d'abord	pour commencer
ensuite	puis
enfin	finalement
pour conclure	à mon avis
selon moi	parce que
ce qui consiste de	donc
alors	cependant
plus précisément	je crois que
je pense que	en ce qui concerne
cela veut dire	

Treatment 2 Additional Transition Words

une fois	par exemple
parfois	

Appendix C

Cloze Activities Treatments 1 and 2

Treatment 1

Choisissez des mots-liens qui conviennent aux phrases suivantes:

_____,ma nouvelle société est gouvernée par un président, _____ c'est une démocratie. Le peuple élit le président_____le peuple doit choisir son propre dirigeant. Les gens peuvent boire de l'alcool et fumer à partir de 18 ans_____il est nécessaire de faire attention aux lois pour les endroits publics._____, il y a la liberté de la presse et d'expression _____ il est nécessaire de faire attention à ce qu'on dit.

Treatment 2

Choisissez des mots-liens qui conviennent aux phrases suivantes:

_____, mon professeur préféré était quelqu'un de très gentil. Il nous donnait des devoirs, _____ il nous accordait toujours du temps supplémentaire pour les finir. _____, il prenait le temps tous les jours de nous lire des histoires, _____, des histoires d'aventure ou de fantaisie. Nous avions un peu de temps tous les jours pour lire un livre de notre choix, _____, si nous ne voulions pas lire, nous pouvions jouer aux cartes de maths au lieu de lire. Moi, j'avais mon livre préféré _____, j'ai choisi de lire tous les jours. _____, je lisais mon livre quand mon ami est venu me parler. Il voulait emprunter mon livre _____ j'ai arrêté de lire et je lui ai donné mon livre. _____, il est nécessaire de dire que j'ai beaucoup appris grâce à ce professeur. Je ne l'oublierai jamais.

Appendix D

Pre-Speaking Treatments 1 and 2

The following activity represents the notes prepared by the researcher as a basis for collaboration with the subjects.

Treatment 1: Creating a civilization on a deserted island

Contenu	**Formes**
structure politique:	une monarchie, une démocratie, l'esclavage, la tyrannie élire, choisir, mettre, décider ➔ Il y a…**un** roi/**une** reine **un/une** president(e) ➔ il n'y a pas **DE** roi, etc. ➔ Le chef de ma sociéte, **c'est un(e)** . . . ➔ Ma société est gouvernée **par un(e)**…
droits de l'homme et la liberté	la liberté de la presse, de religion, d'expression… …est importante parce que….
les lois	le mariage, la cohabitation, l'âge de maturité →à partir de+ âge boire de l'alcool, fumer, conduire → permettre à quelqu'un de faire quelque chose je propose une loi sur… → **DU** marriage → **DE LA** cohabitation une lois à propos de XXXX est importante parce que….
comment maintentir la société?	l'ordre public, la sûreté publique, la justice, la/une punition respecter la loi, suivre, obéir, (ne pas) faire →Il est nécessaire de + (verbe) parce que...

Treatment 1 Sample Response (Shown prior to task)

Pour commencer, ma nouvelle société est gouvernée par un président, alors c'est une démocratie. Le people élit le président, ce qui est important parce que le peuple doit choisir son propre dirigeant. Ensuite, il y a la liberté de la presse et d'expression. À mon avis, c'est très important parce que le peuple a besoin de s'exprimer comme ils veulent. Il y a aussi la liberté de la religion parce que c'est essentiel pour les citoyens de montrer leur dévotion comme ils veulent. En ce qui concerne la religion et la presse, par contre, il est nécessaire de ne pas juger les autres par leurs paroles. Enfin, les gens peuvent boire de l'alcool et fumer à partir de 18 ans mais il est nécessaire de respecter les lois par sur les endroits publics.

Treatment 2: Describe a political issue and an experience you've had with that issue

Content	**Form**
Quels sont des problèmes concernant l'immigration ?	<u>Les pays</u> le Mexique, la Syrie, le Canada la guerre, l'injustice, la famine, la pauvreté, les réfugié(e)s, les immigré(e)s, légal, illégal immigrer, déménager, habiter, s'échapper, partir, venir, avoir le droit de → venir **DU** Mexique (m) → venir **DE** Syrie (f) → aller **AUX** Etats-Unis (p) → aller **EN** France (f) →s'échapper DE + (endroit) OU (chose) →C'est un problème parce que…
Est-ce qu'il y a des problèmes au sujet du mariage ou des relations personnelles ?	<u>le mariage</u> se marier, s'aimer, vivre (ensemble), le divorce, les abus, les drogues la justice, la cohabitation, la famille, les droits →ils **se** marient →ils **ne** se marient **pas**

Quels problèmes pose-t-elle, la religion?	→Je crois que c'est important QUE + (sujet)[11] →Je crois que c'est important DE + (verbe) →C'est un problème parce que… le christianisme, l'Islame croire, louer, montrer (la dévotion), s'exprimer l'église, la dévotion, la mosquée, l'extrémisme →croire EN + (quelqu'un) →c'est un problème parce que…
Existe-t-elle l'égalité?	l'égalité de race l'égalité entre les hommes et les femmes payer, donner, favoriser, gagner, la discrimination, les noir(e)s, les blanc(he)s les entreprises, le salaire, les rôles, les emplois → les hommes gagnent MOINS/AUTANT/PLUS QUE les femmes (vice versa) →c'est un problème parce que…
Quels sont les problèmes concernant les drogues?	légalité des drogues Le canabis, l'héroïne, les stupéfiants (narcotics) →C'est une drogue légale/illégale →c'est un problème parce que…

[11] Despite efforts to avoid the subjunctive, this expression is presented in conjunction with "c'est important + (verbe)" to show that is possible to avoid the subjunctive by using the indicative.

Treatment 2 Sample Response (Shown prior to task)

Je crois qu'il y a plusieurs problèmes politiques qui existent aux États-Unis, par contre il y a beaucoup de bonnes choses aussi. En ce qui concerne l'immigration, il y a beaucoup de gens qui n'ont pas le droit de venir aux États-Unis, alors ils sont rejetés à la frontière. Je pense que c'est important de laisser entrer les immigrés qui veulent échapper à la guerre. Puis, il y a des politiciens qui veulent déporter ceux qui sont déjà aux Etats-Unis mais qui ne sont pas légaux. À mon avis, c'est une mauvaise idée parce que quand j'étais au lycée, j'avais des amis qui venaient de familles illégales. Une fois, en été 2007, j'ai travaillé avec une de ces familles pour gagner de l'argent supplémentaire. C'était une expérience merveilleuse parce qu'ils savaient travailler dur et nous avons besoin de ça dans ce pays.

Appendix E

Post-Survey

Post-study Survey (administered using Qualtrics)

Name:_____

1) What do you think this study was about?

2) How much time (hours and minutes) did you spend using (speaking, writing, reading, listening) your French in the past 3 weeks:

In class:
Doing homework for French class:
Any other purpose (please specify):

3) How helpful did you find the activities you did when meeting with the researcher?

Not helpful			Somewhat helpful					Really helpful	
1	2	3	4	5	6	7	8	9	10

4) How enjoyable were the activities?

Not enjoyable			Somewhat enjoyable					Really enjoyable	
1	2	3	4	5	6	7	8	9	10

5) How did these strategies help you with your French?

6) How have you used these in your French class?

Appendix F

Transcriptions

The following transcriptions lack much punctuation due to pauses and fillers functioning as breaks between clauses and sentences. Where there were clear breaks, punctuation is included.

Group 1- Transition Word Group, Treatment 1 Response (new civilization)

Subject 4
Pour commencer dans ma nouvelle civilisation uh les peuples va élire un président alors il y a une démocratie aussi nous avons uh un tribunal et um et uh la justice est très important dans ma civilisation. Les lois sont justes pour tout le monde c'est-à-dire que tous ont les droits de l'homme tous avons tout ont les droits de l'homme. La famille est la plus importante de ma civilisation alors le mariage est très important aussi. À cause de ça, tout le monde a un père et une mère…um parce que une famille est la structure le plus uh le meilleur pour apprendre les uh les bons qualités et um les bons caractéristiques. Je pense que tout le monde va être heureux mais c'est très possible qu'il y a um quelques um conflits uh entre les personnes. En ce cas um il y…il y a une gouvernement qui peut qui peut uh les aider à trouver une solution de les conflits uh aussi l'opportunité à étudier et travailler sont très importants. Puis il y a beaucoup des écoles et des compagnies que peut uh qui peuvent aider les gens à uh à apprendre et être des bons citoyens. Ma nouvelle civilisation um uh finalement est le meilleur du monde.

Time: *3.15 minutes*

Group 2- Pre-Speaking Group, Treatment 1 Response (new civilization)

Subject 13
Dans ma nouvelle société uh il y a un président qui gouverne uh le peuple les peuples parce que c'est un dem…une démocratie et c'est important pour le peuple d'avoir de défendre contre uh l'anarchie, le monarchie etc. à cause de démocratie les peuples peuvent voter pour le president uh chaque trois ans et il n'est pas nécessaire de voter mais c'est un un droit de l'homme. Dans ma société il y a um un une loi je propose une loi pour le mariage c'est nécessaire de uh le peuple n'obéit les pas les lois de lois uh ils vont à la prison pour un temps de qui est comme la uh sévérité de leur crime et dans la prison ils travaillent beaucoup uh de aide avec uh la nourriture et l'agriculture etcetera uh l'âge de maturité c'est 18 ans comme aux Etats-Unis et uh partout de 18 ans on peut conduire ou fumer ou boire de l'alcool mais c'est important de obéir les lois de maturité um…la démocratie et plus um plus important du peuple et il peut être plus heureux grâce à uh la liberté de la presse et de l'expression et de la religion uh liberté de la religion est le plus important et c'est une loi que les peuples peuvent aller à l'église de leur choisi et um il n'y a pas de d'armes uh en ma nouvelle société parce que ce sont très dangereux et uh et si les peuples ont des armées les armes ils peuvent uh tuer les autres et c'est très difficile de um de d'avoir un bon société avec la les crimes comme tuer ou comme ça et um c'est tout.

Time: *4.05 minutes*

Group 3- Transition Word and Pre-Speaking Group, Treatment 1 Response (new civilaztion)

Subject 2
Uh pour commencer uh ma civilisation a un président qui est éli par les peuples. Je pense que ça c'est important parce que je pense que uh les dirigeants uh sont uh sont meilleurs quand ils uh sont responsables à aux personnes qui a choi…qui um leur a choisi. Aussi je pense que c'est nécessaire uh que uh les citoyens sont involvés uh dans la création de uh leur gouvernement parce que ils doit vivre avec cette gouvernement et je pense les personnes uh vont suivre les lois uh plus heureusement plus uh avec uh avec um plus de contentement si ils sont involvés dans la creation de leur gouvernement uh aussi je uh la justice uh puis les personnes peuvent uh être involvés dans la creation uh des lois uh à mon avis uh les personnes vont suivre les lois si ils les ont créées. Des lois qui que je pense que sont très importants sont les libertés au sujet de la religion uh d'expression et uh de la presse parce que je pense que uh la civilisation est plus réussi uh quand les personnes peuvent parler dire les choses que qu'ils veulent uh à dire et qu'ils veulent sont uh qu'ils qu'ils pensent sont les plus importants pour la civilisation en général uh je pense que la punition est aussi essentielle mais je ne crois pas uh qu'un personne doit être tuée uh mais je pense que la punition comme la service um de la communauté est une bonne façon uh à de créer un bonne civilisation.

Time: *5.00 minutes*

Appendix G

Preparing a Cloze Paragraph[12] Step 1: Connect Sentences

Put the sentences into order and connect the sentences using transition (connector) words:

- My most memorable summer was spent at Cape Cod.
- We had a house by the beach, not far from some little shops.
- We could see sailboats on the sea.
- The neighbors invited us to a BBQ one evening.
- They had a little house with a big backyard and a pool.
- I became friends with their daughter.
- We are still friends.
- I spent hours swimming and playing on the beach.

Possible connector words

- first, first of all, then, after that, finally
- and, also, furthermore, especially, or, or rather, even, actually, in addition
- because, because of, thanks to, since, that is to say, it's the reason why, maybe
- for example, such as, like
- conjunctions
- relative pronouns

Example

1. My most memorable summer was spent at Cape Cod.
2.We had a house by the beach, not far from some little shops.

- My most memorable summer was spent at Cape Cod **WHERE** we had a house by the beach, not far from some little shops.

Preparing a Cloze Paragraph Step 2: Elaborate

Take the above sample and add details:

- **As a child,** my most memorable summer was spent at Cape Cod, WHERE we **rented** a house **that was small but comfortable for my family,** by a **private** beach, not far from some little shops **where tourists could buy souvenirs.**

[12] The first two steps can also be used as an activity with students to practice connecting ideas and elaborate on those ideas.

Preparing a Cloze Paragraph Step 3: Remove connectors and details for students to fill in

- My most memorable summer was spent at Cape Cod as a child, ...we rented a house _____ by a private beach, not far from some little shops _____.